B3075-1

1983 — 1997

OUTLOOK FOR COMMERCIAL AIRCRAFT

Comments and questions may be addressed to Marketing Strategic Plans (18-77),
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JULY 1983

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TABLE OF CONTENTS

	Page
Introduction	3
Traffic	7
Capacity	15
Fleet	21
Cargo	31
Appendices	
A. Econometric Approach	39
B. Definitions	43
C. Traffic and Capacity Detail (Passenger and Cargo)	51
D. Aircraft Detail	59

Introduction

INTRODUCTION

This report prepared by Advanced Market Planning, presents the Douglas Aircraft Company's 1983 fifteen year outlook of commercial air transportation for the period 1983 through 1997.

The outlook is presented into four sections devoted to traffic, capacity, fleet and cargo. The appendices include: Econometric approach, definitions, traffic capacity and aircraft unit forecast details. Each of the four main sections contain detail and a discussion of the approach.

Traffic

TRAFFIC

After two years of minimal growth in world scheduled air traffic, 1982 again was a disappointment. As the expected world economic recovery was delayed, traffic increases did not materialize, putting two major carriers out of business and many others in deep financial straits. Traffic growth in Europe fell by one-half of 1 percent, considerably below the forecast of 4 percent. Europe-Far East traffic grew at a rate of 5.2 percent, half the 10 percent growth prediction, and North Atlantic traffic was flat versus a growth forecast of 3 percent. Even North and Mid-Pacific area showed poor results with traffic growing less than 3 percent versus expectations of almost 9 percent. Traffic in many areas, notably the United States did experience growth, due partially to lower fares. Widespread use of promotional fares characterized 1982. Up to 80 percent of the traffic in the United States moved on discount fares or under bonus travel plans.

A result of the traffic stagnation worldwide was a reversal of the trend toward greater dispersion of air transport operations as measured by routes operated, gateways served, and flight frequency. A similar reversal occurred in 1975-76, but as the world economy recovered from the initial oil pricehike shock, the secular trend toward greater dispersion resumed. A similar return to a more dispersed operating environment will occur as traffic growth resumes.

The traffic outlook for 1983 is expected to improve as the long-awaited recovery finally materializes. In fact, the growth of U.S. traffic in late 1982 and early 1983 turned out to be stronger than expected. A sustained recovery should diminish the impact of protectionism, sentiments and prevent potential travel demand disruptions.

Overall, airline profitability is not likely to return to the industry before 1984. In general, real yields are expected to decline moderately both in 1983 and for the rest of the decade. One exception is the North Atlantic market where competition already has reduced fares to levels that likely will not fall further. The forecast is for real increases in fares in 1983 with this level holding in real terms through 1990. Another exception is the U.S. domestic market where a continuation of the 1982 price wars through mid-1983 is expected. Afterwards, yields will rise faster than inflation for the rest of the decade.

Passenger traffic is forecast through 1997 to grow at rates slower than those experienced in the 1970s. Since traffic is to a large degree driven by income variables, declining rates of economic growth in the future will also lead to lower rates of traffic growth. The lower growth rates will be especially felt in the international arena where the annual average rate of 11.7 percent for 1969-81 will decline substantially to 6.4 percent average rate for 1982-97. In domestic markets, the average rate will decline from 7 percent to 5.6 percent. Although both will be lower compared to the 1970s, international will continue to grow at faster rates than domestic traffic.

INTERNATIONAL SECTORS

The international sector of the passenger air transport industry is characterized by great diversity in airline route networks, airline policies and objectives, governments, and economic systems. Each of the nineteen IATA regions studied is influenced by the sizes, populations, and levels of economic activity of the countries involved; their trading and travel patterns; their relations with other nations; and competing modes of transport. Therefore, factors having the greatest influence on traffic vary considerably by region.

In most cases, international traffic grew more slowly than domestic traffic in 1982 (1.1 percent RPK growth for international compared with 3.4 percent for domestic). This is the first time since 1974 that domestic traffic outgrew international.

Looking to the future, international traffic is forecast to grow at an average of 6.6 percent annually from 1983 to 1990. Average annual regional growth will range from 4.7 percent for the Intra-North America market to 9.1 percent for the Far East-Pacific. These extremes contrast with a predicted annual growth rate of 6.6 percent for worldwide international traffic. The relatively high traffic growth expectations for the Far East reflect that region's superior economic outlook.

Generally, 1983 will be a low-growth (3.3 percent) year for all international regions reflecting limited world economic growth. Peak growth is predicted for 1984 followed by slightly slower growth rates thereafter.

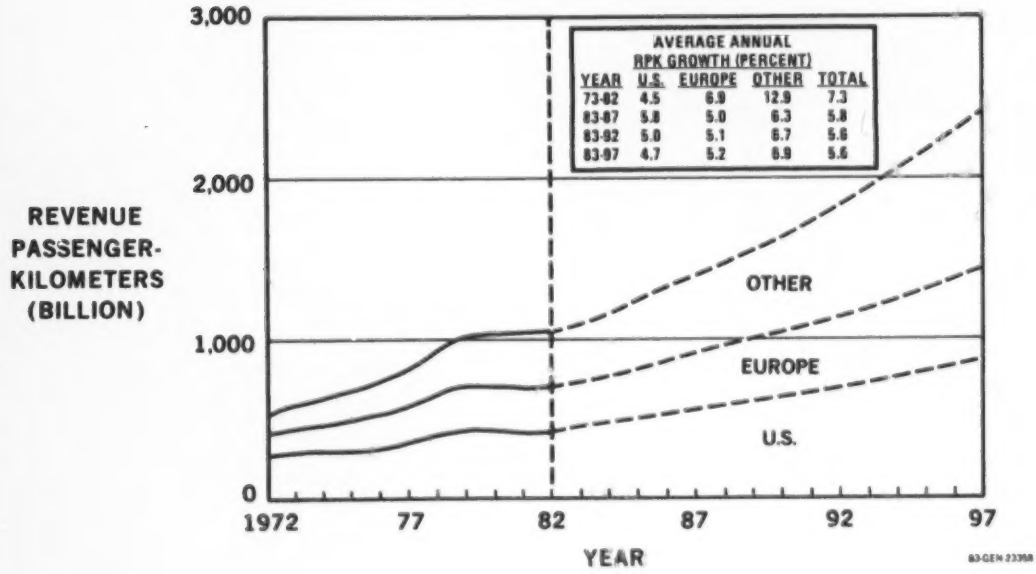
The recession has been very harmful to the world's airlines but it does have its brighter side. Fuel and labor cost declines have provided some relief. Relatively small declines in revenue or increases in costs have significant impacts on profitability due to the industry's high proportion of fixed costs over the short term. This characteristic exacerbated the negative impact of 1982's problems but will aid carriers when conditions improve - in some cases with swift and dramatic return to profitability.

DOMESTIC REGIONS

Traffic development within a particular domestic region can be much more complicated than in the international sector. The level of traffic is determined by standards of living, distances between cities, the presence and quality of alternative modes of transportation, and the level of development of the system.

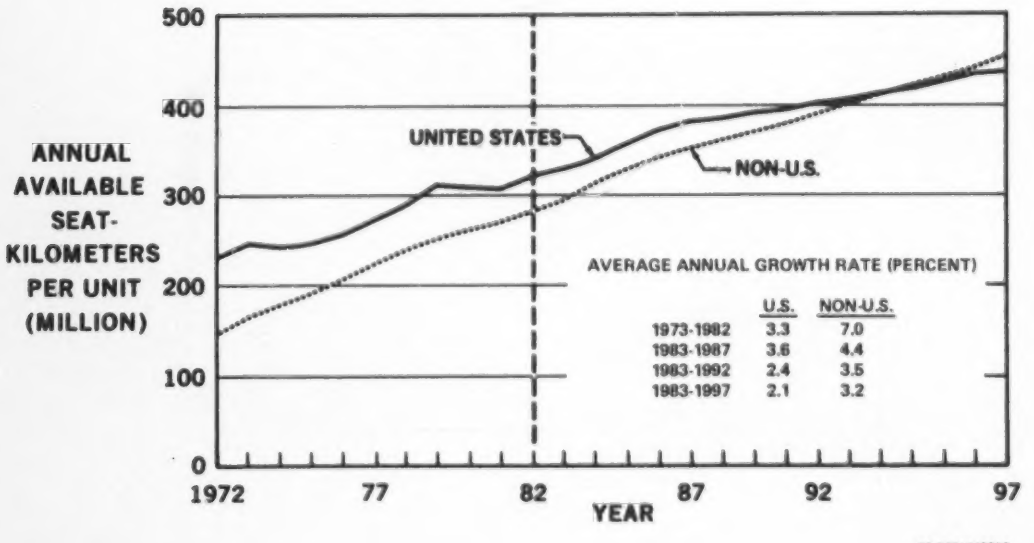
The domestic regions are expected to grow at a 5.7 percent rate through 1983-1990. Over the short term, domestic traffic is expected to pick up along with economic activity. The United States domestic air passenger system represents close to 70 percent of the world's total. In 1982, the system grew at an estimated 4.7 percent rate due to substantial cuts in real fares. As a result of increasing competition and excess capacity, carriers dropped fares substantially in a number of markets. The primary force behind U.S. demand is real personal consumption expenditures (PCE). PCE growth however has recently been minimal with increases of 0.2 percent and 0.9 percent in 1981 and 1982, respectively. For 1983, real PCE is expected to increase 3.6 percent with an average growth of 2.8 percent during the 1984-90 period.

PASSENGER TRAFFIC — ALL SERVICES



PASSENGER AIRCRAFT

PRODUCTIVITY GROWTH



TRAFFIC (RPKs) GROWTH AND AREA SHARE

BY DOMICILED AREA

DOMICILED AREA (AIRLINES OF:)	AVERAGE ANNUAL GROWTH (%)				AREA SHARE (%)			
	1973-82	1983-87	1983-92	1983-97	1982	1987	1992	1997
AFRICA	11.2	5.3	5.6	5.8	2.8	2.7	2.8	2.9
CANADA	8.4	4.7	5.1	5.2	4.3	4.1	4.0	4.0
MIDDLE EAST	15.0	6.8	7.3	7.5	4.4	4.6	5.1	5.7
LATIN AMERICA	10.5	5.3	6.6	7.2	5.5	5.4	6.1	6.9
PACIFIC AND ASIA	15.5	7.0	7.2	7.2	16.7	17.7	19.3	20.9
EUROPE	6.9	5.0	5.1	5.2	25.6	24.7	24.4	24.0
U.S.	4.5	5.8	5.0	4.7	40.7	40.8	38.3	35.6
WORLD	7.3	5.8	5.6	5.6	100.0	100.0	100.0	100.0

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CHARTER TRAFFIC (RPKs) AS A PERCENT OF TOTAL TRAFFIC

BY DOMICILED AREA

DOMICILED AREA (AIRLINES OF:)	ACTUAL		ESTIMATED	FORECAST		
	1972	1977	1982	1987	1992	1997
AFRICA	11.2	7.9	7.8	7.4	6.8	6.2
CANADA	12.2	22.1	23.3	24.6	25.6	26.4
MIDDLE EAST	7.9	2.8	4.1	3.8	3.4	3.0
LATIN AMERICA	1.6	2.8	1.2	1.2	1.1	0.9
PACIFIC AND ASIA	2.6	1.9	1.4	1.3	1.2	1.1
EUROPE	24.1	29.5	23.6	23.0	22.2	21.3
U.S.	11.5	10.3	4.0	3.5	3.3	3.2
WORLD	13.7	14.2	9.4	8.8	8.4	8.0
WORLD CHARTER RPKs (BILLION)	71.6	115.7	99.4	123.6	154.1	192.1

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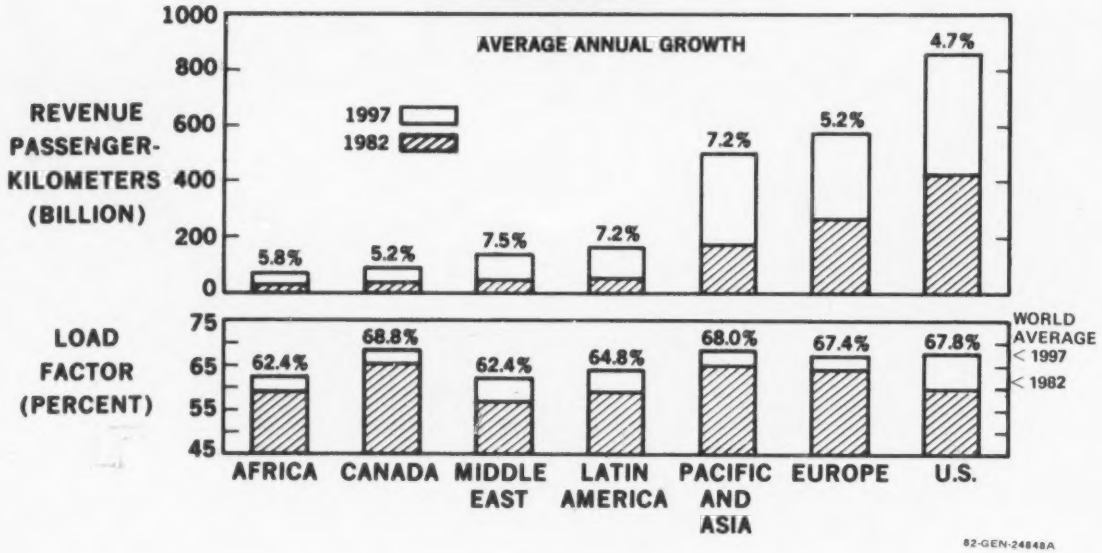
ALL-SERVICE TRAFFIC (RPKs) AND LOAD FACTORS

BY DOMICILED AREA

1982-1997



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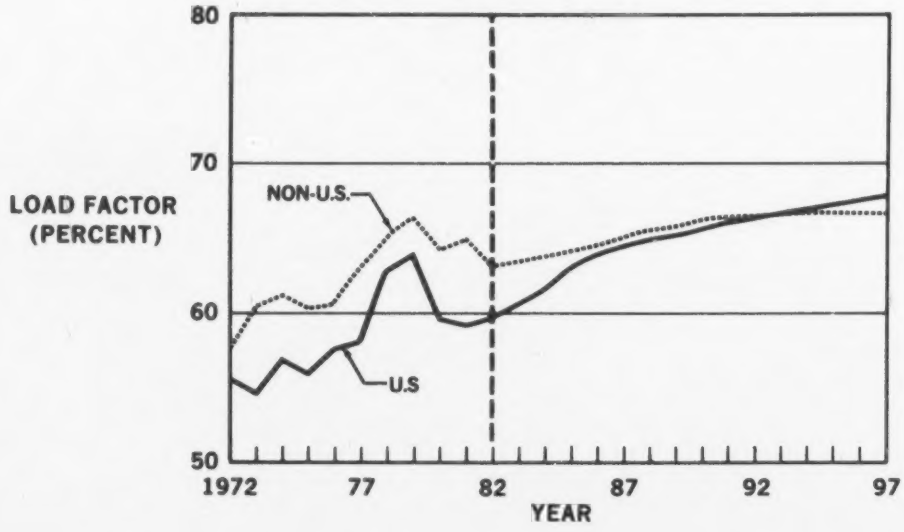
PASSENGER AIRCRAFT

AVERAGE PASSENGER LOAD FACTOR



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Capacity

CAPACITY

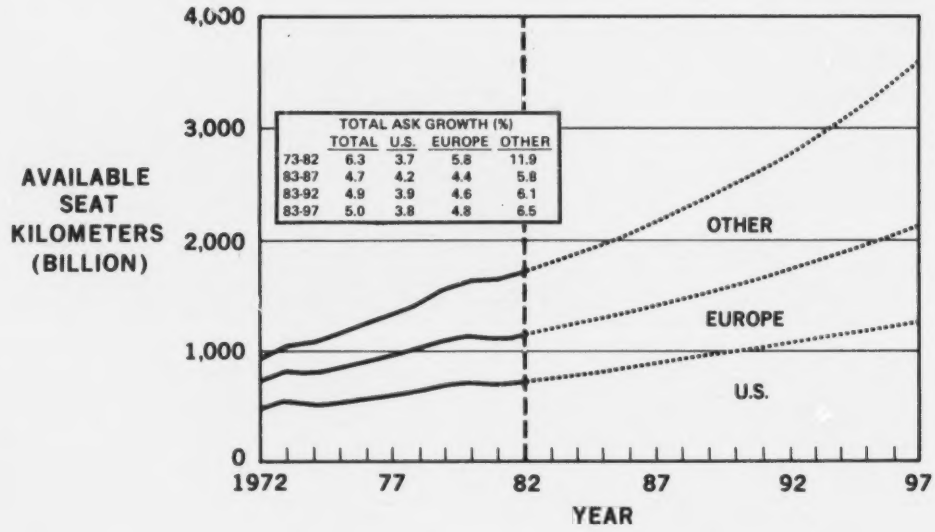
Capacity, as measured by available seat kilometers, is forecast to increase at an average annual rate of 5 percent from 1982-97. This represents a reduction from the 6.3 percent annual average recorded during the 1972-82 time period. However, the 5 percent forecast still produces a doubling of the world's available seat kilometers within the 15 year forecast. The 1982 world ASK level is twice the 1971 world ASK level.

Traffic growth is forecast to outpace capacity growth over the next fifteen years. This will produce a gradual upward trend in load factors (the ratio of revenue passenger kilometers to available seat kilometers) throughout the forecast period. By 1997, airlines are anticipated to have a revenue paying passenger in two out of every three seat miles flown.

The gradual increase in load factors is a consequence of airline efforts to improve profitability with better management of their available capacity. The practicality of achieving annual load factors in the mid to high 60's has been questioned by several industry observers on numerous occasions. Seasonality difference and off-peak scheduling requirements have often been cited as significant constraints to achieving high annual load factors. The expected continuation of a very competitive pricing environment will require airlines to fill an increasing percentage of their seats in order to turn a profit. Advances in computer reservation technology, relaxation of denied boarding compensation and payments for reservations are all being explored by airlines as possible avenues for obtaining higher load factors in the future. Nevertheless our forecast does not exceed the 1979 - 65 percent peak load factor until 1988. The trend is upward but at a very modest rate.

A very competitive pricing environment has obscured the difference between scheduled and non-scheduled services in recent years. Non-scheduled capacity in 1982 was 15 percent less than the amount provided in 1978. No significant increase in capacity has been observed in this sector of the business since 1976. Consequently, the share of all service capacity provided by scheduled service has risen from 90 percent in 1972 to 92.5 percent in 1982 and is forecast to reach over 93 percent by 1997.

CAPACITY (ASK) REQUIREMENT — ALL SERVICES



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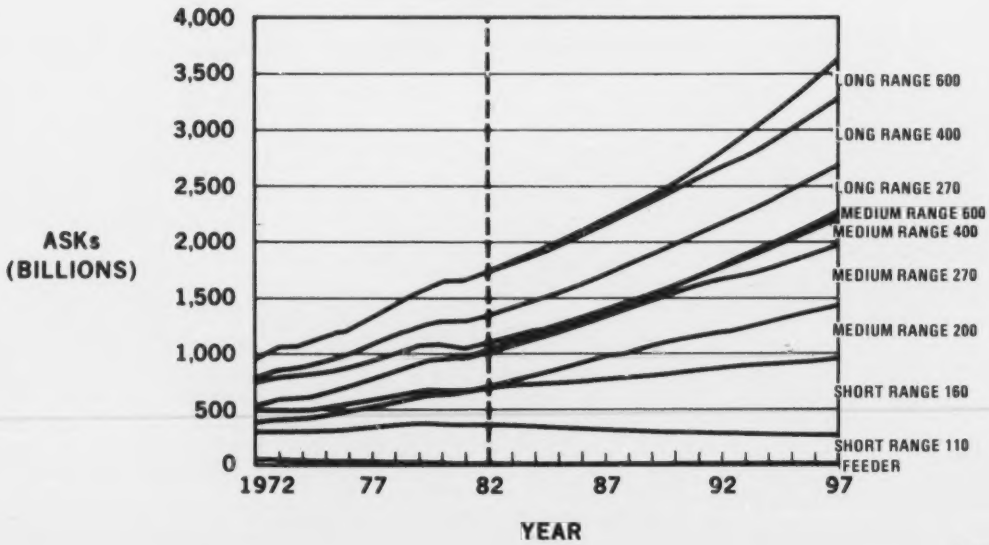
PASSENGER AIRCRAFT

CAPACITY TREND

BY GENERIC CLASS



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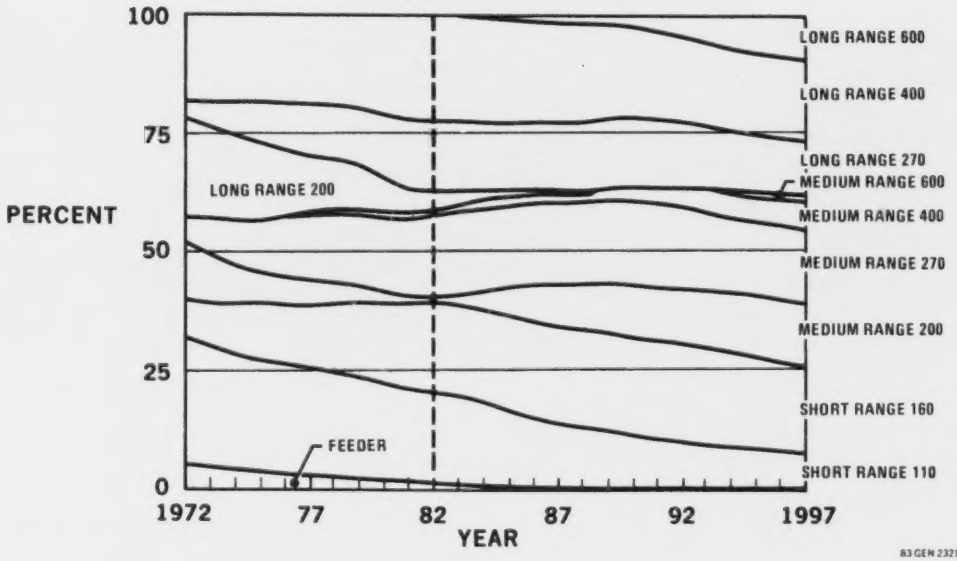
PASSENGER AIRCRAFT

CAPACITY PERCENTAGES

BY GENERIC CLASS



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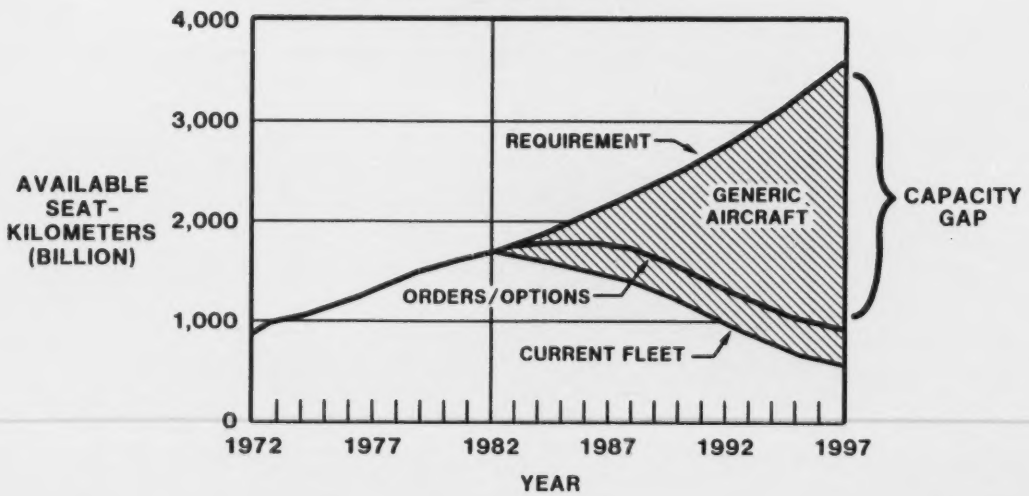
PASSENGER AIRCRAFT CAPACITY SUPPLY FORECAST

ALL SERVICES - WORLD



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Fleet

Historically, traffic growth was high enough to allow for significant increases in aircraft size. An airline could conceivably experience enough traffic growth to replace a 160 seat aircraft with a 270 seat aircraft in two to three year's time. Average annual growth in seats per aircraft from 1972 to 1982 was 3.8 percent, and this is reflective of wide-body equipment coming into the fleet. Seat-mile cost was a major factor in aircraft selection in the early 70's when traffic was strong and fuel prices were becoming a significant concern for the airlines. When twin engine jets were introduced in the late 70's traffic growth had slowed and fuel prices were increasing, causing airlines to place more emphasis on aircraft-mile cost when evaluating new equipment. Deregulation in the United States also placed more emphasis on departures and hence on smaller equipment.

The recent changes in the economic and regulatory environment have affected airlines' planning. The world-wide recession led to stagnant traffic growth intensifying competition among airlines. Escalation in operating expenses exceeded growth in yields creating grave financial difficulty for most airlines. The difficulties in the airline industry have become magnified in the United States with deregulation. This caused a reorganization of route systems, and scheduling in most carriers as a means of competing in the market.

In terms of number of units, the SR-160 will be the dominant aircraft class in 1997, and will account for 32 percent of the fleet. There is a new aircraft requirement for 1589 units out of a total need of 4424 for all classes. The significance of this class is that it is a major growth market. This class offers a growth out of SR-110 equipment, currently the largest class in terms of units. The combination of forecast traffic growth and the sensitivity to frequencies in relation to passenger appeal in short-to medium-range markets make the SR-160 a desirable aircraft type in terms of aircraft-mile cost and scheduling flexibility.

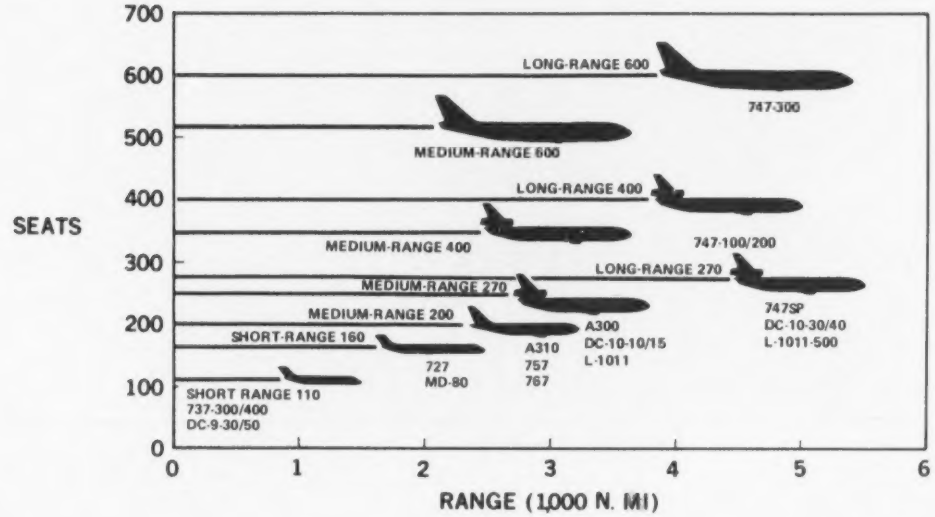
The MR-200 is a growth market with current orders and options (options which are assumed to be exercised) totalling 482; this is more than one half of all current orders and options for all classes of aircraft combined. The need for this aircraft is a result of current airline philosophy and forecast traffic growth lower than the historic trend. Historically, airlines had higher traffic growth and could replace 160 seat aircraft with 270 seat aircraft. However, in today's environment one cannot expect to grow from SR-160 class equipment into MR-270 equipment in a short enough time span to make this an economically sound policy.

The SR-110 has retirements greater than any other class with over 1600 units by 1997. This is primarily due to the age of these aircraft, along with increasing environmental consideration throughout the world, and the fact that several airlines will require larger equipment. The SR-110 has a new aircraft requirement for 758 units. These are all considered replacement units because of the numerous retirements in this class of aircraft. This results in a loss of market share ASK's for the SR-110 class from 20 percent in 1982 to 7.5 percent in 1997. There will be a need for this type of aircraft to develop new markets and increase frequencies on others, but for the most part it is expected that SR-160 aircraft will takeover the role of the SR-110 class due to traffic growth.

The MR-270, MR-400, and MR-600 are defined as a combination of seats and range requirement aircraft type. The critical item is not the actual range capabilities of the aircraft, but at what range it is actually utilized. Medium range widebodies should maintain their market share due to the large number of markets already saturated with departures. Examples of these markets include U.S. transcontinental, and one-stop transcontinental, some domestic Pacific and Asian markets and a number of European markets.

Long range equipment should see continued importance as airlines increase emphasis on non-stop long haul operations. In long range operations the non-stop and one-stop markets are experiencing strong growth, while the two or more stop operations have declined. This demonstrates a move to improved point to point services as passenger demand and aircraft efficiency increases. The LR-270 offers an aircraft of size and range capability for continued improvement of point to point service on relatively thin markets. The LR-400 is expected to see continued growth as a number of other non-stop long haul markets experience pressure on seats per departure growth due to the density of current airline operations. This is also the reason the LR-600 becomes a major factor in many airline fleets. The North Atlantic region is a perfect example of a departure constrained market where a large percentage of the RPK growth will be accommodated by growth in seats per departure.

PASSENGER AIRCRAFT
GENERIC TYPES



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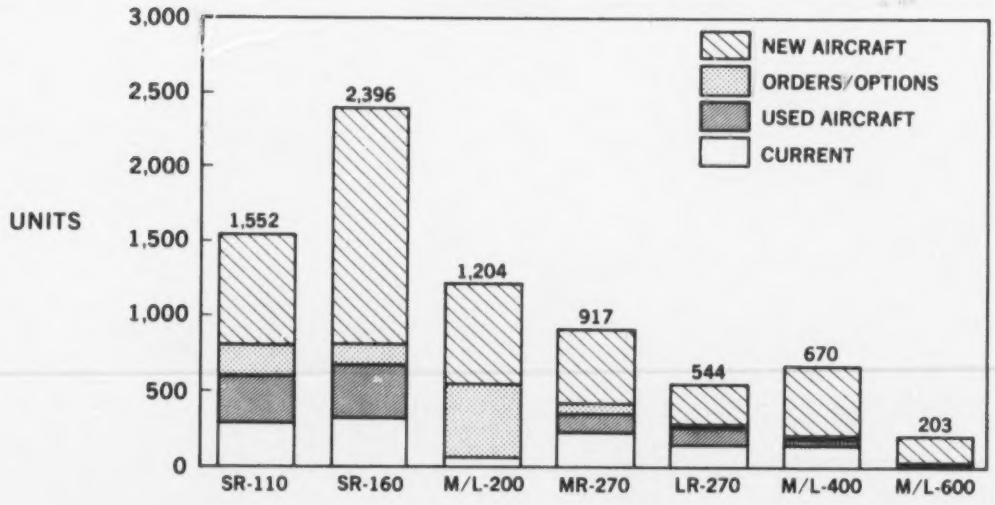
PASSENGER AIRCRAFT

1997 FLEET COMPOSITION
BY GENERIC CLASS



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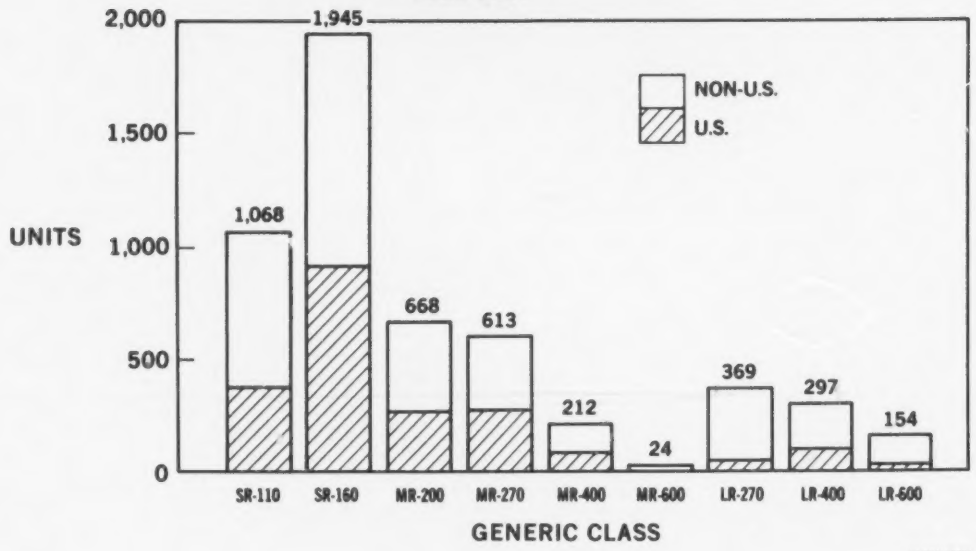
PASSENGER AIRCRAFT MARKET BY DOMICILED AREA

1983-1997



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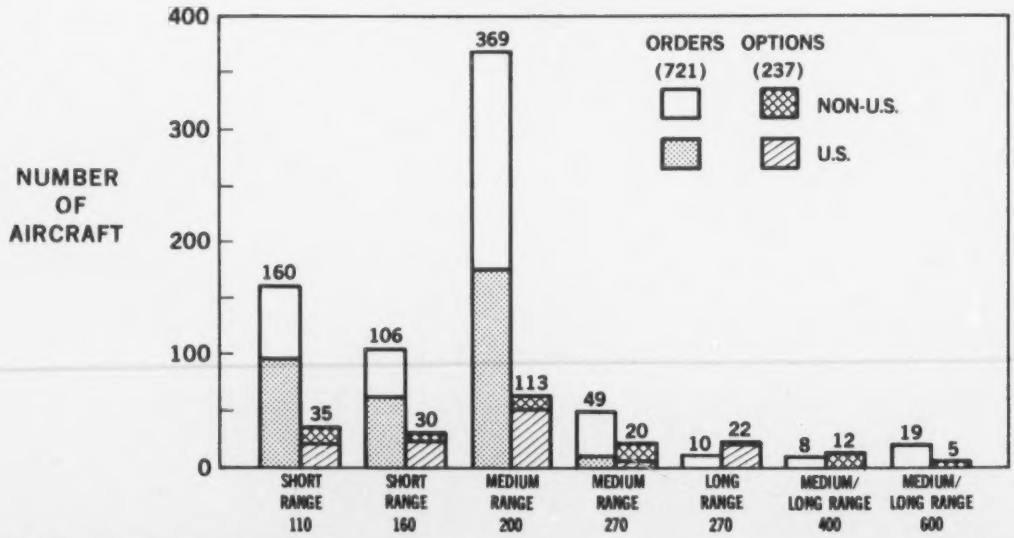
PASSENGER AIRCRAFT

ORDERS AND OPTIONS

BY GENERIC CLASS*

1983-1997



*DOES NOT INCLUDE FEEDER/NON-JET AIRCRAFT

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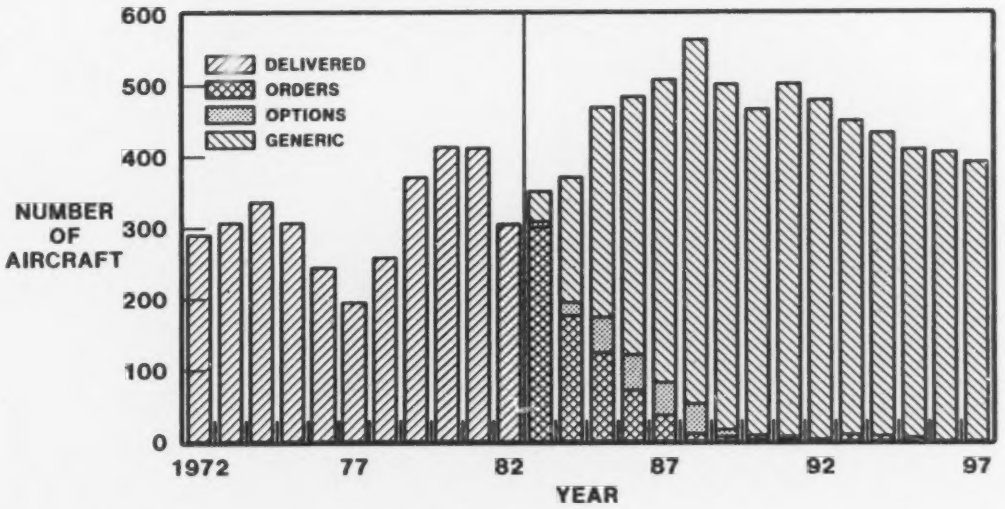
PASSENGER AIRCRAFT DELIVERIES
1972-1997



DOES NOT INCLUDE FEEDER/NON-JET AIRCRAFT

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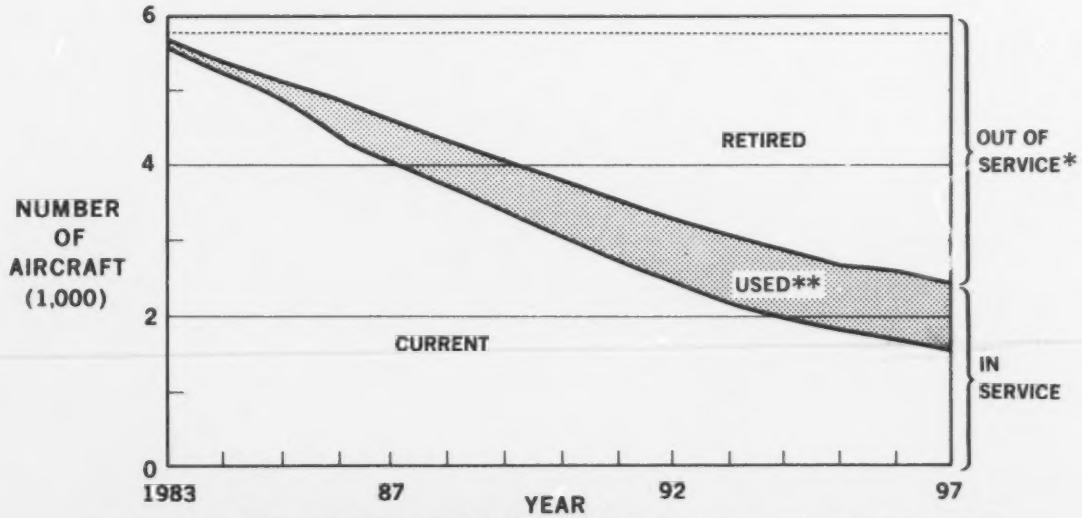
PASSENGER AIRCRAFT

EFFECTS OF RETIREMENT ON 1982 FLEET

5,869 AIRCRAFT IN YEAR-END 1982 FLEET

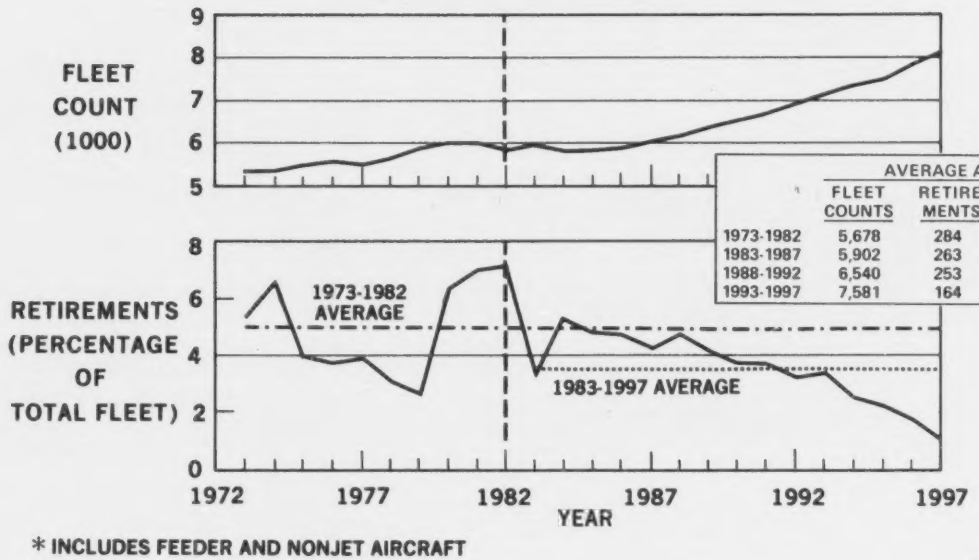


* SOLD/LEASED TO CARRIERS OUTSIDE OF THE STUDY GROUP OR PERMANENTLY GROUNDED

** SOLD/LEASED TO CARRIERS WITHIN THE STUDY GROUP

82-GEN-24824A

RETIREMENTS AS COMPARED WITH YEAR-END FLEET COUNT*



	AVERAGE ANNUAL		
	FLEET COUNTS	RETIRE-MENTS	PERCENT
1973-1982	5,678	284	5.0
1983-1987	5,902	263	4.5
1988-1992	6,540	253	3.9
1993-1997	7,581	164	2.2

* INCLUDES FEEDER AND NONJET AIRCRAFT

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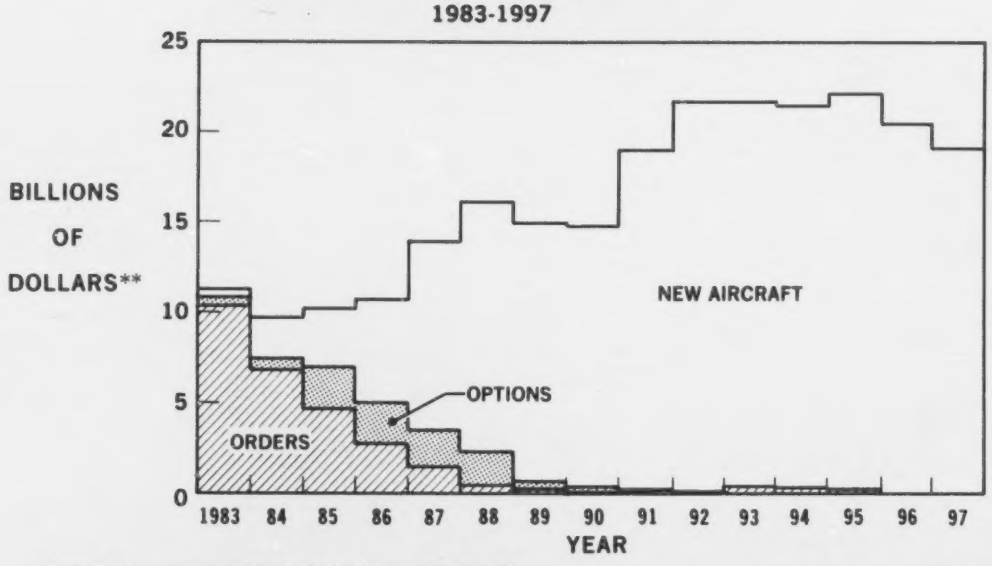
CAPITAL REQUIREMENTS FOR NEW PASSENGER AIRCRAFT*



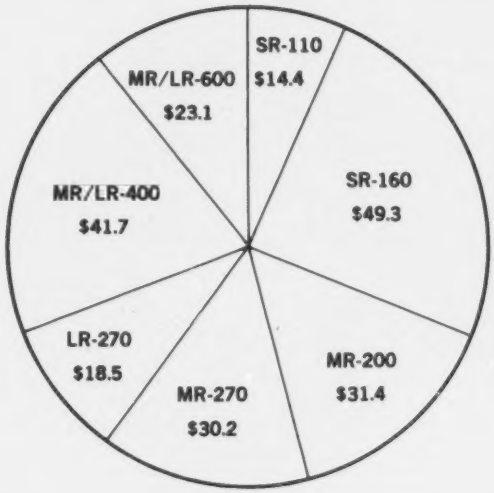
*DOES NOT INCLUDE FEEDER OR NONJET AIRCRAFT

**CONSTANT 1983 DOLLARS

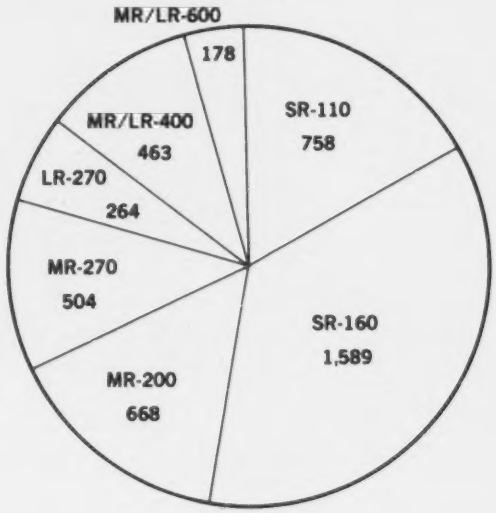
83-GEN-23607

COMMERCIAL AIRCRAFT REQUIREMENT

1983-1997

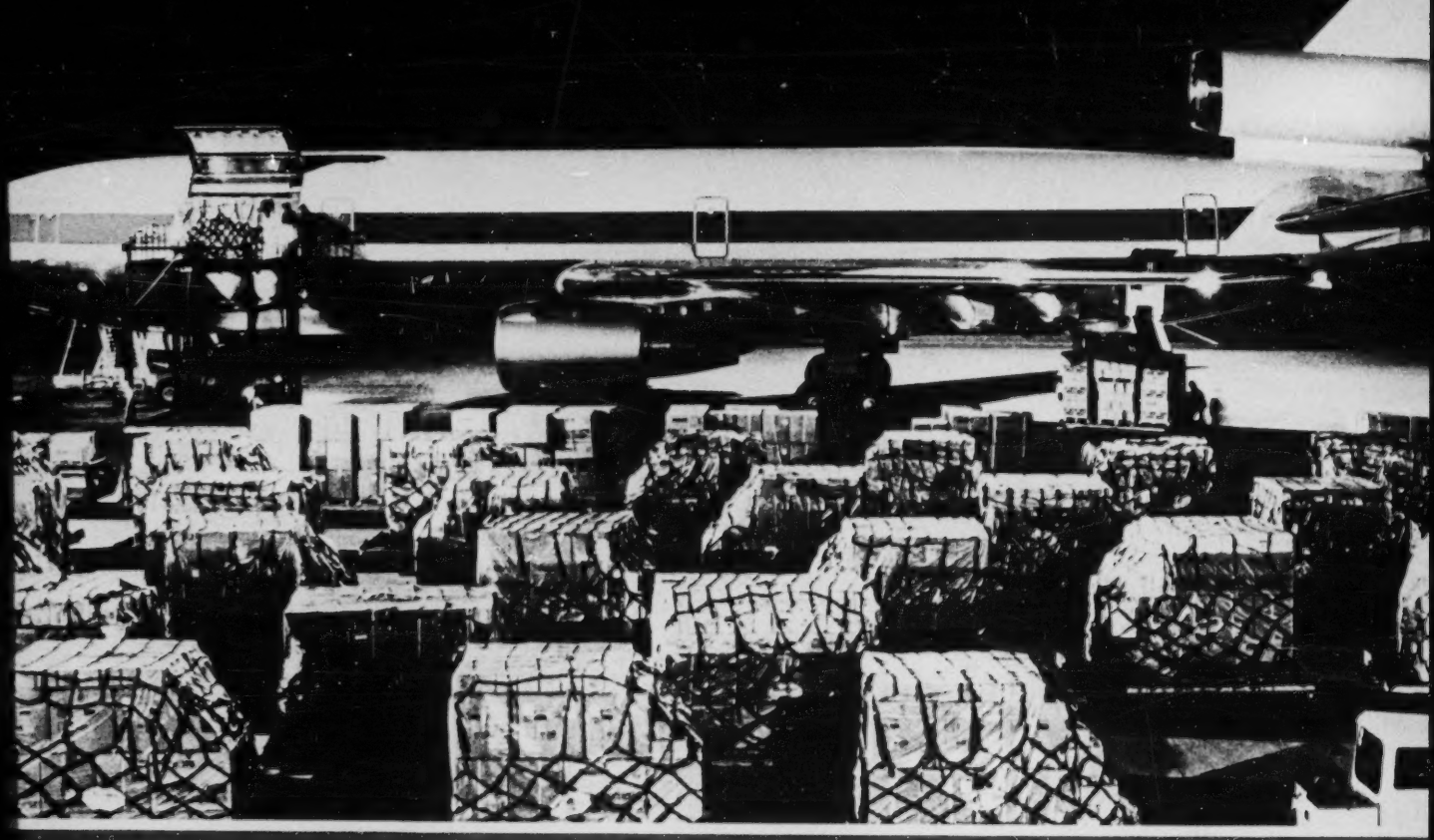


$208.6 BILLION



4,424 UNITS

83-GEN-23388



Cargo

CARGO

During the 1972-82 period, world air freight traffic grew at an average annual rate of 5.3 percent. Growth varied from a high of 13.8 percent in 1977 to a low of -3.0 percent in 1982. For the decade from 1982 to 1992, Douglas forecasts a 5.7 percent annual growth rate ranging from a low of -1.1 percent for 1983 to a 7.0 percent high in 1985.

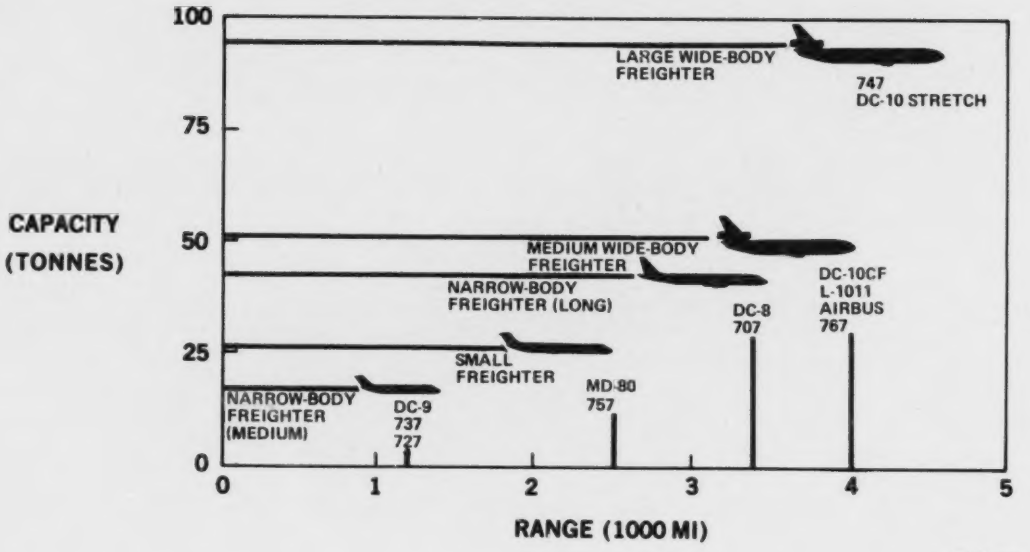
The world recession in 1982 adversely affected cargo volume with world scheduled freight revenue tonne kilometer (RPK) growth declining to -3.7 percent compared to 2.5 percent in 1981 and a 7.4 percent per year average for the 10 years ending with 1981. Domestic freight traffic declined by 2.4 percent while international volume decreased 4.9 percent. International air carriage is relatively more important for freight than for passenger traffic. International operations accounted for 77 percent of freight RTKs which contrasts with 49 percent for RPKs. Mail volumes, currently accounting for slightly more than 10 percent of world cargo RTKs, are excluded from this forecast.

Although growth rates have subsided somewhat in recent years, the air cargo industry has achieved remarkable growth. World scheduled freight RTKs for 1982 are approximately 2.0 times the corresponding level for 1972, and, depending upon the measurement used, cargo accounts for 10 to 20 percent of commercial air transport worldwide.

More than 60 percent of world air freight volume is concentrated in four regions. Of these four, the two largest (North Atlantic and U.S. domestic) are relatively mature markets and are forecast to underperform the world average. The North Atlantic outlook reflects relatively slow growing economies on both sides of the ocean and a lack of incentive for additional capacity due to chronic low yields. In the United States, forecast growth is restrained by modest economic growth, strong surface competition, and growth of carriers not reporting data. Europe-Far East (ranked third) and the North and Mid Pacific (fourth) are forecast to slightly outgrow the world trend. World wide freight growth of 2.9 percent is forecast for 1983 followed by 7.9 percent and 7.6 percent in 1985. Freight RTKs by 1997 will have growth by 170 percent over the 1982 level.

CARGO AIRCRAFT

GENERIC TYPES



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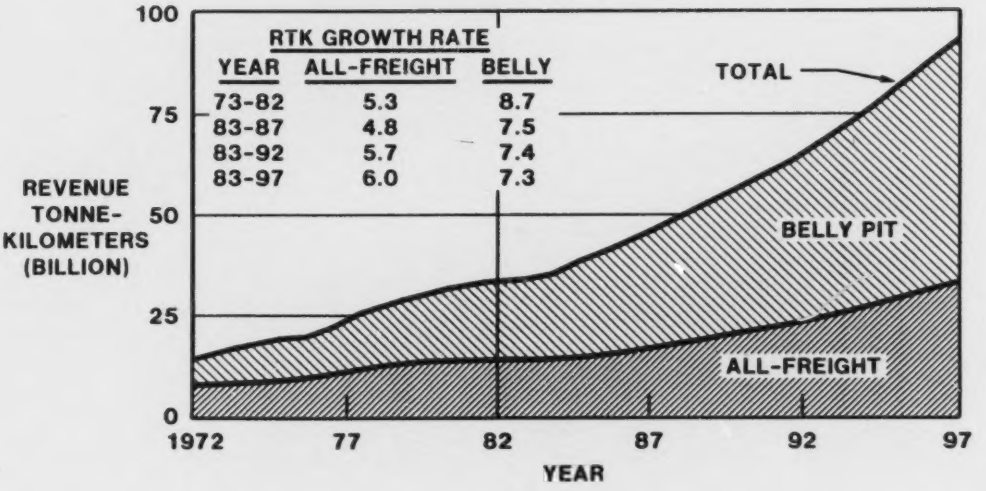
TOTAL WORLD CARGO TRAFFIC



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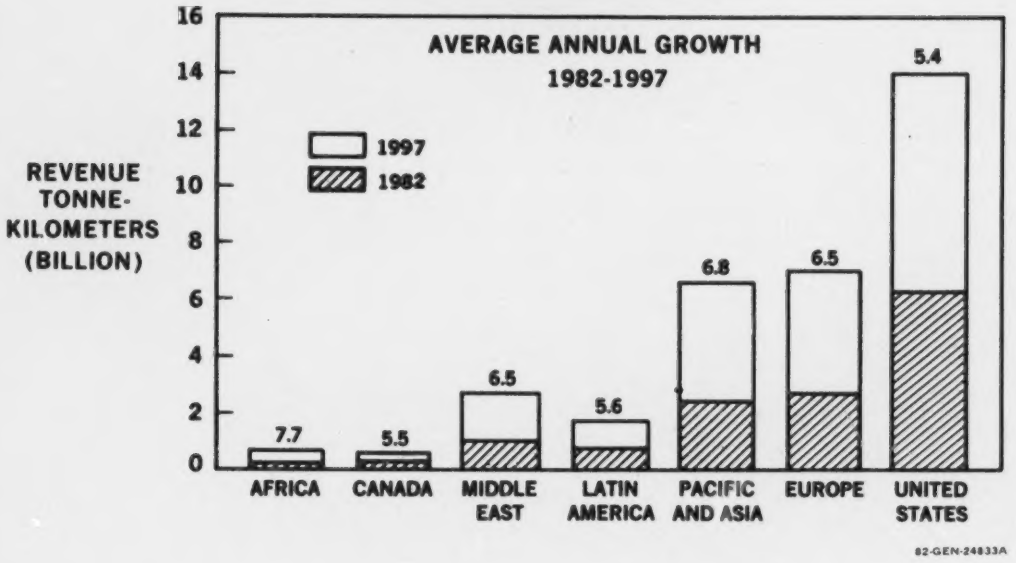
ALL-FREIGHT REVENUE TONNE-KILOMETERS

BY DOMICILED AREA



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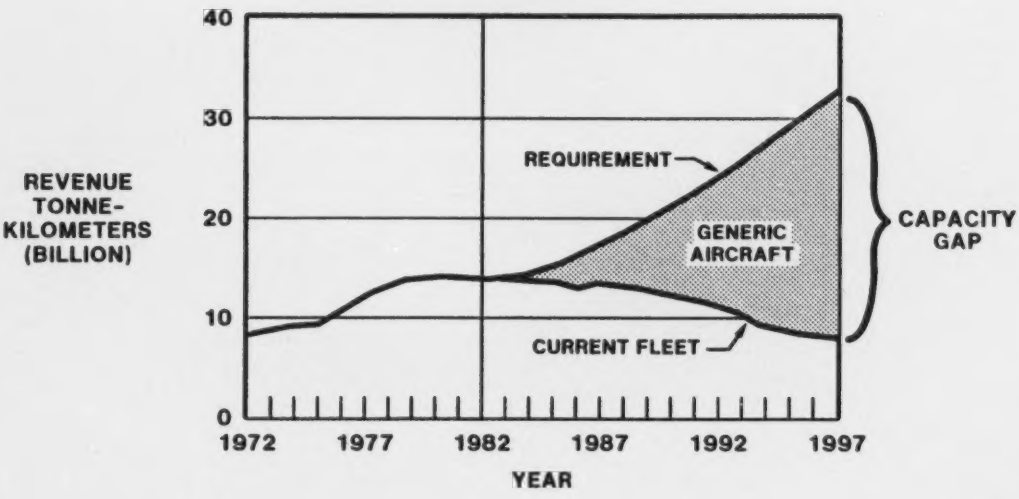
REVENUE TONNE-KILOMETER SUPPLY FORECAST

ALL-FREIGHT



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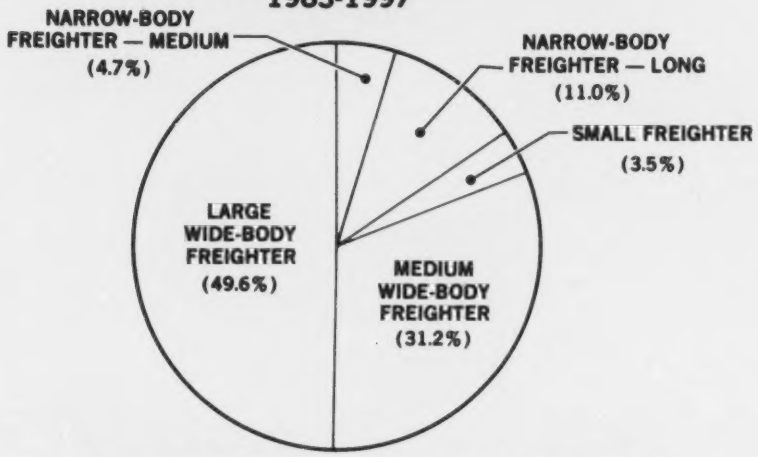
CARGO AIRCRAFT

ADDITIONAL ALL-FREIGHT REVENUE TONNE-KILOMETERS

BY GENERIC TYPE

1983-1997


NARROW-BODY FREIGHTER — MEDIUM (4.7%)
NARROW-BODY FREIGHTER — LONG (11.0%)
SMALL FREIGHTER (3.5%)
LARGE WIDE-BODY FREIGHTER (49.6%)
MEDIUM WIDE-BODY FREIGHTER (31.2%)

25.4 BILLION REVENUE TONNE-KILOMETERS

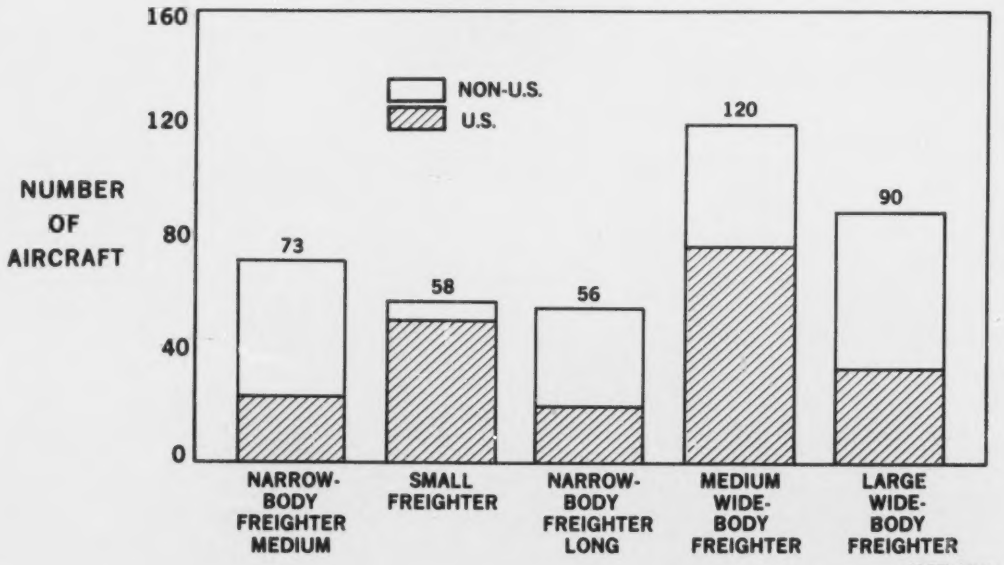
82-GEN-24849A

CARGO AIRCRAFT

GENERIC AIRCRAFT

BY DOMICILED AREA

1983-1997

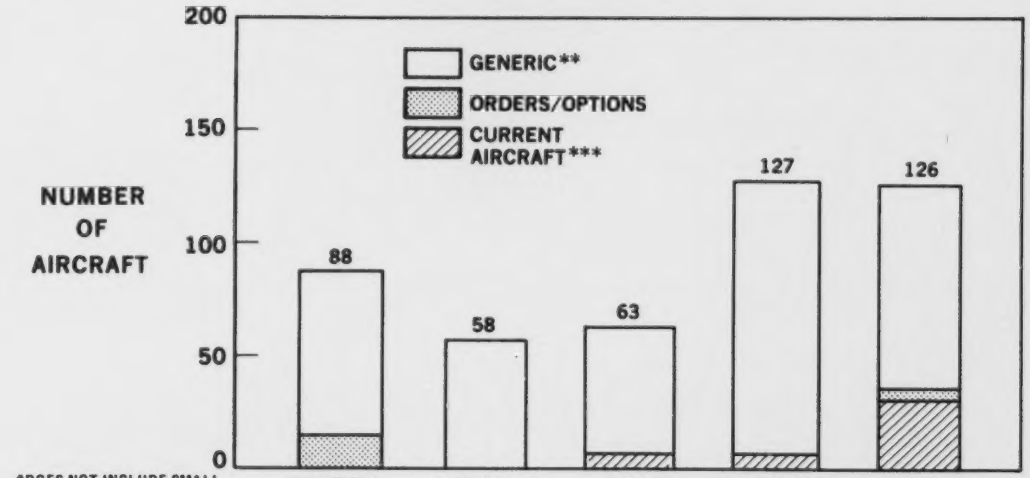


82-GEN-24846A

CARGO AIRCRAFT

1997 FLEET COMPOSITION*

BY GENERIC TYPE



*DOES NOT INCLUDE SMALL JET/NON-JET AIRCRAFT

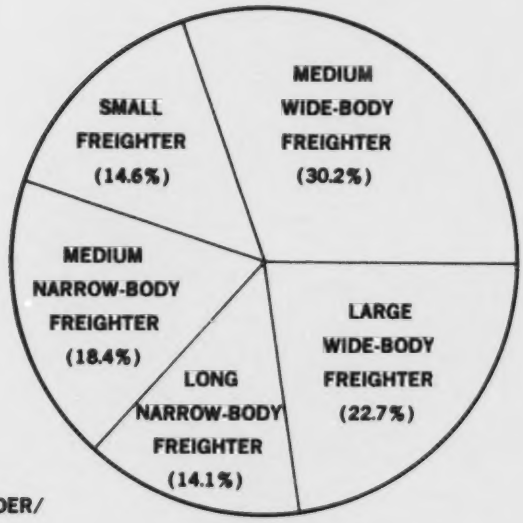
**NOT ADJUSTED FOR REDUCTION BY USED AIRCRAFT

***AIRCRAFT IN FLEET AS OF 31 DECEMBER 1982

82-GEN-24844A

FREIGHTER DEMAND*

1983-1997



397 UNITS

*DOES NOT INCLUDE FEEDER/ NON-JET AIRCRAFT

83-GEN-23387

Appendices

APPENDIX A
ECONOMETRIC APPROACH

REGIONAL TRAFFIC FORECASTING

The methodology used in developing the regional traffic forecasts was based upon econometric forecasting procedures. This technique is quite common in the aviation forecasting community. It involves developing a traffic forecast on the basis of historical relationships between traffic and explanatory variables, such as: income, price and quality of service. The forecasts of the explanatory variables are easier to develop than forecasting traffic itself.

Traffic is forecast for 32 regions throughout the world as part of the "Outlook" process. In several cases (generally where yield data are unavailable or incomplete) econometric analysis did not produce satisfactory results and judgement analysis relying primarily on experience and market knowledge was added.

Forecasts of the explanatory variables, usually income and price, were obtained from the following sources: income - was produced based upon the Wharton Econometrics forecast of output and prices in the major industrialized nations; price - the real yield assumptions were linked to the IATA Traffic Forecasting Committee regional real yield forecasts.

U. S. AIRLINE INDUSTRY MODEL

The U.S. Airline Industry Model (developed by the Douglas Aircraft Company) forecasts traffic demand, revenues, expenses, and profits for the U.S. airline industry. Traffic demand forecasts are created for the Certificated CAB set of commercial airlines. Their individual carrier traffic forecasts are used to forecast total revenues for the U.S. industry. Concurrently, macro forecasts of industry expense items are also created allowing the model to project future industry profit levels given the revenue and expense forecasts.

The traffic demand forecasts are derived by using econometric equations which are typically a function of price, incomes, and an airline's market share. These forecasts are then used to estimate the industries' revenue generation. The expense equations are also econometrically estimated based on such operational variables as capacity levels, number of departures, stage length, etc. The amount of profits then becomes an identity which subtracts total industry expenses from revenues.

At the present time there are over 600 variables in the model. Of these, 200 are based on behavioral equations with the remainder being either identities or exogenously determined.

METHODOLOGY - INDIVIDUAL AIRLINES

In an effort to produce a reliable forecast of airline activity over the long-term planning horizon, selected traffic forecasting models were developed on an individual airline basis. Since the number of airlines under study is very large, traffic forecasting models on an individual airline basis were limited to those airlines contributing the top 85 percent of scheduled revenue passenger kilometers (RPKs) or approximately 50 airlines. In order to be compatible with our regional total market forecasts, these individual airline forecasts were generated by region of operation as defined in the IATA traffic conference breakdowns.

The models were single equation formulation of the logarithm of individual airline's regional RPKs as a function of the logarithm of regional income and real regional average fares. The real income is composed of the weighted real gross domestic product (GDP) of the countries represented in each region. The real regional average fares are the ICAO estimates of nominal regional average fares converted to real terms using a composite deflation for the countries in the particular region. Other sources of fare information are data provided by individual airlines as well as the Official Airline Guide. The weighting on the individual countries was on the basis of 1975 constant dollar GDP size. While participation by country of residence would be a theoretically superior measure for weightings, the availability of consistent data precluded the use of such weighting, and GDP size was used as a reasonable proxy.

U. S. DOMESTIC LOAD FACTOR RATIONAL

The continued increase in the percent of available seating capacity occupied (i.e., the load factor) is an area of some concern to industry observers. During the 1970s the load factors in the U.S. Domestic system ranged from 50 to 60 percent while the forecast has load factors during the next fifteen years of being between 60 to 70 percent. What factors are behind this upward increase in load factors?

The explanation of this phenomenon is simply that airlines will need to become more efficient (the relation of inputs to output) in all facets of their operations in order to survive cost and competitive pressures that are likely to confront the industry over the balance of this planning cycle. Unit labor and fuel costs are anticipated to increase in excess of the general rate of inflation, while yields (the revenue per passenger-kilometer) will increase at the same or a slightly slower rate than inflation. The only way to remain profitable in the event of these circumstances is to become more productive with airline equipment. Aside from the operational decisions of modern equipment and high use per day (i.e., aircraft utilization), airlines will continue to strive to maximize onboard load factors.

APPENDIX B
DEFINITIONS

ALL-FREIGHT SERVICE -- Refers to the flights performed by aircraft carrying loads other than passenger -- i.e., freight and mail -- and excludes all flights carrying one or more revenue passengers and flights listed in schedules as providing any passenger service.

AVAILABLE SEAT-KILOMETERS -- The product obtained by multiplying the number of passenger seats available on each flight stage by the flight stage distance.

BELLY-PIT RTKs -- Freight carried below the main deck (in the belly) on a passenger flight or freight on the main deck in combi operations.

CURRENT FLEET -- Aircraft on hand as of December 31, 1982.

DOMICILED AREA -- A geographic definition used to aggregate the total system traffic of all carriers whose home base lies within the geographic area.

GENERIC AIRCRAFT -- A broad definition of seat size and range characteristics of current and future aircraft. The following lists the generic aircraft and typical annual capacity (ASKs in millions) and the table lists all specific aircraft members of each passenger class.

PASSENGER TYPES

FEEDER -- Small propeller, turboprop and jet aircraft with less than 60 seats. (29)

SHORT-RANGE 110 -- Low seating capacity (60-135) with a range up to 1500 nautical miles. (168)

SHORT-RANGE 160 -- Seating from 136-175 with a range of 2500 nautical miles. (282)

MEDIUM-RANGE 200 -- Primarily a wide-body class with seating capacity from 176-225 and a range of 2500 nautical miles. (418)

MEDIUM-RANGE 270 -- Wide-body class seating from 226-310 with a range up to 3500 nautical miles. (611)

LONG-RANGE 270 -- A high capacity, wide-body class offering 226-310 seats with a range spanning 3500-6000 nautical miles. (747)

MEDIUM RANGE 400 -- Exclusively wide-body class with seating capacity from 311-470 and a range from 3500-6000 nautical miles. (1116)

LONG-RANGE 400 -- High capacity, wide-body class with seating capacity covering 311-470 and with a range from 3500-6000 nautical miles. (1376)

MEDIUM-RANGE 600 -- Stretched, high capacity, wide-body class with seating capacity spanning 471-600 and with a range up to 4500 nautical miles. (1608)

LONG-RANGE 600 -- High capacity, wide-body class with seating capacity covering 471-600 and with a range up to 6000 nautical miles. (2006)

CARGO TYPES (Including convertible-freighters):

NARROW-BODY FREIGHTER-MEDIUM -- Currently available versions of DC-9, 737 and 727-100 freighter and convertible-freighter aircraft with a lift of up to 17 metric tones (19 tons).

NARROW-BODY FREIGHTER-LONG -- Currently available versions of DC-8, and 707 freighters and convertible-freighter aircraft with a lift of up to 42 metric tons (46 tons).

SMALL FREIGHTER -- A cargo aircraft with a volume of 185 cubic meters (6500 cubic feet), 2500 nautical mile range and a lift of up to 26 metric tons (29 tons). Could include the following types of aircraft: 757, 727-200, and MD-80 all-freight aircraft and proposed cargo versions of new 150-seater.

MEDIUM WIDE-BODY FREIGHTER -- A cargo aircraft with a volume of 350 cubic meters (12,000 cubic feet), 3500 nautical mile range, and a lift of up to 50 metric tons (55 tons).

Includes DC-10CF and proposed A300, A310 and 767 class aircraft.

LARGE WIDE-BODY FREIGHTER -- A cargo aircraft with a volume of 670 cubic meters (24,000 cubic feet), 4500 nautical mile range, and a lift of up to 95 metric tons (105 tons). Includes 747 and proposed DC-10 Stretch class aircraft.

NONSCHEDULED SERVICE (Revenue) -- Charter flights and special flights performed for remuneration on an irregular basis.

PRODUCTIVITY -- Productivity is measured in terms of available seat-kilometers for passenger aircraft and revenue tonne-kilometers for cargo aircraft.

RETAINED AIRCRAFT -- An aircraft that is sold or leased by its operating carrier to another carrier within the study group.

PERMANENTLY RETIRED -- An aircraft that is either sold or leased to a carrier outside of the study group or it is assumed scrapped or grounded.

REVENUE PASSENGER-KILOMETERS -- Is obtained by multiplying the number of revenue passengers carried on each flight by the flight distance.

REVENUE PASSENGER LOAD FACTOR -- Revenue passenger-kilometers expressed as a percentage of available seat-kilometers.

REVENUE TONNE (METRIC TON) KILOMETERS -- Is obtained by multiplying the number of revenue metric tons carried on each flight by the flight distance.

ROUTE/AREA DEFINITIONS -- These definitions are drawn from the IATA standards.

NORTH AMERICA -- Canada and the United States, including Hawaii and Alaska but excluding the Canal Zone, Puerto Rico, and the Virgin Islands.

CENTRAL AMERICA -- The Bahamas, Bermuda, Belize, the Canal Zone, Costa Rica, El Salvador, Guatemala, Honduras, the Islands of the Caribbean Sea (including Puerto Rico, Antilles, and the Virgin Islands), Mexico, Nicaragua, and Panama.

SOUTH AMERICA -- Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Falkland Islands, French Guyana, Guyana, Paraguay, Peru, Surinam, Uruguay, and Venezuela.

NORTH ATLANTIC -- Any route between Europe, Africa, or the Middle East and the Western Hemisphere via a gateway in North America.

MID-ATLANTIC -- Any route between Europe, Africa, or the Middle East and the Western Hemisphere via a gateway in Central America or the following South American countries: Bolivia, Colombia, Ecuador, French Guyana, Guyana, Peru, Surinam, or Venezuela.

SOUTH ATLANTIC -- Any route between Europe, Africa, or the Middle East and the Western Hemisphere via a gateway in Argentina, Brazil, Chile, Paraguay or Uruguay.

EUROPE -- Geographical Europe and Algeria, the Azores, the Canary Islands, Madeira, Morocco, Tunisia, and Turkey.

NORTH AFRICA -- The part of Africa north of the Equator, but excluding those areas mentioned in Europe and the Middle East.

SOUTHERN AFRICA -- The part of Africa south of the Equator.

MIDDLE EAST -- Bahrein, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, United Arab Emirates, Yemen Arab Republic, and Yemen People's Democratic Republic.

FAR EAST AND AUSTRALASIA -- IATA Traffic Conference Area 3.

NORTH AND MID-PACIFIC -- Any route between points in Conference Area 1 and points in Conference Area 3 (except Australasia) via the North and Central Pacific Ocean.

SOUTH PACIFIC -- Any route between points in Conference Area 1 and points in Australasia via the South Pacific Ocean.

Traffic Conference No. 1 encompasses all of the North and South American continents and the islands adjacent thereto, Bermuda, the West Indies, the Islands of the Caribbean Sea, and the Hawaiian Islands, including Midway and Palmyra.

Traffic Conference No. 2 encompasses all of Europe including that part of the Union of Soviet Socialist Republics in Europe, the islands adjacent thereto, Iceland, the Azores, the Middle East, all of Africa and the islands adjacent thereto, Ascension Island, and that part of Asia lying west of and including Iran.

Traffic Conference No. 3 encompasses all of Asia and the islands thereto except that portion included in Traffic Conference No. 2, all of the East Indies, Australia, New Zealand, and the islands adjacent thereto and the islands of the Pacific Ocean except those included in Traffic Conference No. 1.

SCHEDULED SERVICE (Revenue) -- Scheduled flights which are open to use by the public and are performed according to a published timetable, or so regularly or frequently as to constitute a recognizable systematic series, and extra flights occasioned by overflow traffic from the scheduled flights.

SPECIFIC AIRCRAFT -- Existing and new types of aircraft for which orders have been contracted with a manufacturer.

PASSENGER AIRCRAFT
BY
GENERIC CLASS

SHORT-RANGE 110

BA-146-200
BAC-111-200
BAC-111-300
BAC-111-400
BAC-111-475
BAC-111-500
B727-100
B727-100C
B727-100QC
B737-100
B737-200
B737-200C
B737-200QC
B737-300
Caravelle 10B
Caravelle 10R
Caravelle 11R
Caravelle 12B
Caravelle 3
Caravelle 6N
Caravelle 6R
DC-9-10
DC-9-10MC
DC-9-10RC
DC-9-20
DC-9-30
DC-9-30CF
DC-9-30RC
DC-9-40
DC-9-50
F-28-1000
F-28-2000
F-28-3000
F-28-4000
F-28-6000
Trident 1C
Trident 1E
Trident 2E
TU-104
TU-134

SHORT-RANGE 160

B727-200
Super 80
Mercure
Trident 3B

MEDIUM-RANGE 200

A-310-100
A-310-200
B707-120
B707-120B
B707-138B
B707-220
B707-320
B707-320B
B707-320C
B707-420
B720
B720B
B757-200
B767-200
Comet 4
Comet 4B
Comet 4C
Concorde
CV-880
CV-990A
DC-8-20
DC-8-30
DC-8-40
DC-8-50
DC-8-50CF
DC-8-62
DC-8-62CF
IL-62
Super VC-10
TU-154
VC-10

MEDIUM-RANGE 270

A-300B-1
A-300B-2
A-300B-2K
A-300B-4
A-300B-600
A-300C-4
B747-SP
B747-200CSCD
B747-200SCD
DC-10-10
DC-10-10CF
DC-10-15
DC-10-30CF
DC-10-30
DC-10-40
DC-8-61
DC-8-61CF
DC-8-63
DC-8-63CF
DC-8-63PF
DC-8-71
DC-8-71CF
DC-8-73
DC-8-73CF
L-1011-1
L-1011-100
L-1011-200
L-1011-500

LONG-RANGE 270

A-300B-600
B747-SP
B747-200CSCD
B747-200FSCD
B747-200SCD
DC-10-30
DC-10-30CF
DC-10-30ER
DC-10-40
DC-8-63
DC-8-63CF
DC-8-63PF
DC-8-73
DC-8-73CF
IL-86
L-1011-500

MEDIUM-RANGE 400

B747-100
B747-100RF
B747-100SR
B747-200C
B747-200

LONG-RANGE 400

B747-100
B747-100RF
B747-200
B747-200C
B747-200R

MEDIUM-RANGE 600

B747-300
B747-300C

LONG-RANGE 600

B747-300
B747-300C

FEEDER

YS-11
Viscounts
F-27
Herald
AN-12/24/26
Britannias
CV-2/3/4/5/600
YAK-40

APPENDIX C
TRAFFIC AND CAPACITY DETAIL
(PASSENGER AND CARGO)

PASSENGER TRAFFIC HISTORY AND FORECAST

TOTAL WORLD

TOTAL REPORT (RPKs AND ASKs IN BILLIONS)

	SCHEDULED SERVICE					NONSCHEDULED SERVICE					ALL SERVICES				
YEAR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR
1971	390.7	0.0	771.3	0.0	50.6	64.0	0.0	85.7	0.0	74.6	454.7	0.0	857.0	0.0	53.0
1972	452.1	15.7	835.6	8.3	54.1	71.6	11.8	94.3	10.0	75.9	523.8	15.1	930.0	8.5	56.3
1973	519.2	14.8	939.2	12.4	55.2	83.7	16.8	111.7	18.4	74.9	603.0	15.1	1051.0	13.0	57.3
1974	548.2	5.5	964.6	2.7	56.8	92.6	10.6	120.3	7.6	77.0	640.8	6.2	1084.9	3.2	59.0
1975	574.1	4.7	1021.1	5.8	56.2	104.0	12.3	142.3	18.3	73.0	678.1	5.8	1163.5	7.2	58.2
1976	632.8	10.2	1101.0	7.8	57.4	108.3	4.1	150.4	5.6	72.0	741.2	9.3	1251.4	7.5	59.2
1977	696.6	10.0	1187.7	7.8	58.6	115.7	6.7	148.3	-1.3	78.0	812.4	9.6	1336.0	6.7	60.8
1978	802.2	15.1	1287.5	8.4	62.3	120.1	3.7	152.0	2.4	79.0	922.3	13.5	1439.5	7.7	64.0
1979	906.6	13.0	1422.2	10.4	63.7	114.5	-4.6	143.0	-5.9	80.0	1021.1	10.7	1565.2	8.7	65.2
1980	926.2	2.1	1519.1	6.8	60.9	104.5	-8.7	133.4	-6.7	78.3	1030.7	0.9	1652.5	5.5	62.3
1981	943.3	1.8	1539.8	1.3	61.2	99.4	-4.8	126.6	-5.0	78.4	1042.7	1.1	1666.4	0.8	62.5
1982	961.8*	1.9	1591.1*	3.3	60.4	99.3*	-0.0	129.0*	1.8	77.0	1061.2*	1.7	1720.1*	3.2	61.6
1983**	1005.6	4.5	1647.3	3.5	61.0	103.5	4.1	134.2	4.0	77.1	1109.2	4.5	1781.5	3.5	62.2
1984	1070.8	6.4	1734.6	5.3	61.7	108.1	4.4	139.7	4.1	77.3	1178.9	6.2	1874.4	5.2	62.9
1985	1140.5	6.5	1819.4	4.8	62.6	113.0	4.5	145.9	4.4	77.4	1253.6	6.3	1965.3	4.8	63.7
1986	1203.7	5.5	1904.6	4.6	63.2	118.1	4.5	152.0	4.2	77.7	1321.9	5.4	2056.7	4.6	64.2
1987	1281.8	6.4	2008.3	5.4	63.8	123.6	4.5	158.4	4.1	78.0	1405.4	6.3	2166.8	5.3	64.8
1988	1360.7	6.1	2115.4	5.3	64.3	129.3	4.6	165.5	4.5	78.1	1490.0	6.0	2281.0	5.2	65.3
1989	1432.1	5.2	2218.7	4.8	64.5	135.2	4.6	173.1	4.6	78.1	1567.3	5.1	2391.9	4.8	65.5
1990	1507.8	5.2	2318.5	4.5	65.0	141.2	4.4	180.9	4.4	78.1	1649.1	5.2	2499.5	4.5	65.9
1991	1593.9	5.7	2436.1	5.0	65.4	147.5	4.4	188.7	4.3	78.1	1741.5	5.6	2624.8	5.0	66.3
1992	1682.5	5.5	2567.6	5.4	65.5	154.1	4.4	196.8	4.2	78.2	1836.6	5.4	2764.5	5.3	66.4
1993	1777.1	5.6	2702.7	5.2	65.7	160.9	4.4	205.3	4.3	78.3	1938.1	5.5	2908.1	5.2	66.6
1994	1877.8	5.6	2849.6	5.4	65.9	168.2	4.4	214.6	4.5	78.3	2046.0	5.5	3064.2	5.3	66.7
1995	1985.2	5.7	3007.0	5.5	66.0	175.7	4.5	224.4	4.5	78.3	2160.9	5.6	3231.4	5.4	66.8
1996	2099.8	5.7	3175.7	5.6	66.1	183.7	4.5	234.6	4.5	78.3	2283.5	5.6	3410.3	5.5	66.9
1997	2222.8	5.8	3354.8	5.6	66.2	192.1	4.5	245.4	4.6	78.2	2414.9	5.7	3600.2	5.5	67.0

*ESTIMATED VALUES FOR NON-U.S. AIRLINES
**FORECAST BEGINS IN 1983

PASSENGER TRAFFIC HISTORY AND FORECAST

TOTAL U.S.

TOTAL REPORT (RPKs AND ASKs IN BILLIONS)

	SCHEDULED SERVICE					NONSCHEDULED SERVICE					ALL SERVICES				
YEAR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR
1971	217.6	0.0	446.6	0.0	48.7	34.1	0.0	40.9	0.0	83.3	251.7	0.0	487.5	0.0	51.6
1972	246.4	13.2	463.3	3.7	53.1	31.8	-6.5	38.0	-6.9	83.6	278.3	10.5	501.4	2.8	55.5
1973	264.5	7.3	505.8	9.1	52.3	35.6	11.7	43.5	14.3	81.7	300.2	7.8	549.4	9.5	54.6
1974	266.9	0.8	484.5	-4.2	55.0	33.2	-6.7	43.7	0.3	76.0	300.1	-0.0	528.2	-3.8	56.8
1975	267.6	0.2	494.6	2.0	54.1	30.6	-7.6	38.5	-11.8	79.6	298.3	-0.6	533.2	0.9	55.9
1976	293.9	9.8	527.2	6.5	55.7	33.6	9.7	42.0	8.9	80.2	327.6	9.8	569.2	6.7	57.5
1977	317.7	8.1	565.3	7.2	56.2	36.5	8.5	45.1	7.4	81.0	354.3	8.1	610.4	7.2	58.0
1978	372.1	17.1	604.8	6.9	61.5	33.5	-8.3	40.5	-10.0	82.6	405.6	14.4	645.4	5.7	62.8
1979	420.6	13.0	668.7	10.5	62.8	26.1	-22.0	30.7	-24.1	84.9	446.7	10.1	699.5	8.3	63.8
1980	409.9	-2.5	694.4	3.8	59.0	20.2	-22.6	25.6	-16.6	78.8	430.1	-3.7	720.0	2.9	59.7
1981	399.2	-2.6	680.9	-1.9	58.6	17.0	-15.7	21.1	-17.7	80.7	416.2	-3.2	702.0	-2.5	59.2
1982	414.8	3.9	702.1	3.1	59.0	17.1	0.6	21.3	1.1	80.3	431.9	3.7	723.4	3.0	59.7
1983*	442.2	6.6	736.2	4.8	60.0	17.7	3.3	22.1	3.8	79.9	459.9	6.4	758.3	4.8	60.6
1984	467.6	5.7	765.7	4.0	61.0	18.3	3.4	22.7	2.5	80.6	485.9	5.6	788.5	3.9	61.6
1985	497.5	6.3	794.4	3.7	62.6	18.9	3.3	23.5	3.4	80.6	516.4	6.2	817.9	3.7	63.1
1986	522.1	4.9	823.9	3.7	63.3	19.5	3.0	24.0	2.3	81.1	541.6	4.8	848.0	3.6	63.8
1987	552.9	5.9	863.8	4.8	64.0	20.1	2.9	24.6	2.2	81.7	573.1	5.8	888.4	4.7	64.5
1988	582.1	5.2	903.4	4.5	64.4	20.7	2.9	25.3	2.9	81.7	602.8	5.1	928.7	4.5	64.9
1989	604.1	3.7	932.6	3.2	64.7	21.3	2.9	26.1	3.0	81.6	625.4	3.7	958.7	3.2	65.2
1990	627.2	3.8	962.9	3.2	65.1	21.9	3.0	26.8	2.9	81.7	649.2	3.7	989.8	3.2	65.5
1991	654.6	4.3	997.6	3.6	65.6	22.6	3.0	27.5	2.4	82.2	677.2	4.3	1025.2	3.5	66.0
1992	680.4	3.9	1033.7	3.6	65.8	23.3	3.0	28.2	2.5	82.6	703.8	3.9	1062.0	3.5	66.2
1993	707.6	4.0	1069.5	3.4	66.1	24.0	3.1	28.8	2.1	83.5	731.7	3.9	1098.4	3.4	66.6
1994	736.3	4.0	1106.9	3.4	66.5	24.8	3.1	29.7	3.1	83.5	761.1	4.0	1136.6	3.4	66.9
1995	766.4	4.0	1148.1	3.7	66.7	25.6	3.1	30.6	3.1	83.5	792.1	4.0	1178.7	3.7	67.2
1996	798.3	4.1	1190.8	3.7	67.0	26.4	3.1	31.6	3.1	83.5	824.7	4.1	1222.4	3.7	67.4
1997	832.5	4.2	1235.4	3.7	67.3	27.2	3.1	32.6	3.1	83.5	859.7	4.2	1268.0	3.7	67.8

*FORECAST BEGINS IN 1983

PASSENGER TRAFFIC HISTORY AND FORECAST

TOTAL NON-U.S.

TOTAL REPORT (RPKs AND ASKs IN BILLIONS)

	SCHEDULED SERVICE					NONSCHEDULED SERVICE					ALL SERVICES				
YEAR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR
1971	173.0	0.0	324.6	0.0	53.3	29.9	0.0	44.8	0.0	66.8	203.0	0.0	369.5	0.0	54.9
1972	205.7	18.8	372.2	14.6	55.2	39.7	32.6	56.2	25.4	70.6	245.4	20.9	428.5	15.9	57.2
1973	254.7	23.8	433.3	16.4	58.7	48.0	21.0	68.1	21.1	70.5	302.7	23.3	501.5	17.0	60.3
1974	281.3	10.4	480.1	10.7	58.5	59.3	23.5	76.5	12.3	77.5	340.7	12.5	556.7	10.9	61.2
1975	306.5	8.9	526.4	9.6	58.2	73.3	23.4	103.8	35.5	70.6	379.8	11.4	630.3	13.2	60.2
1976	338.9	10.5	573.7	8.9	59.0	74.6	1.8	108.4	4.4	68.8	413.6	8.8	682.1	8.2	60.6
1977	378.8	11.7	622.3	8.4	60.8	79.1	5.9	103.2	-4.7	76.6	458.0	10.7	725.5	6.3	63.1
1978	430.0	13.5	682.6	9.6	63.0	86.6	9.4	111.4	7.9	77.7	516.6	12.8	794.1	9.4	65.0
1979	485.9	13.0	753.4	10.3	64.5	88.3	2.0	112.2	0.7	78.7	574.3	11.1	865.7	9.0	66.3
1980	516.3	6.2	824.7	9.4	62.6	84.2	-4.6	107.7	-3.9	78.2	600.6	4.5	932.4	7.7	64.4
1981	544.1	5.3	858.8	4.1	63.3	82.3	-2.2	105.5	-2.0	78.0	626.5	4.3	964.4	3.4	64.9
1982	546.9*	0.5	889.0*	3.5	61.5	82.2*	-0.1	107.6*	2.0	76.3	629.2*	0.4	996.6*	3.3	63.1
1983**	563.4	3.0	911.1	2.4	61.8	85.8	4.3	112.0	4.0	76.5	649.2	3.1	1023.1	2.6	63.4
1984	603.1	7.0	968.8	6.3	62.2	89.8	4.6	117.0	4.4	76.7	693.0	6.7	1085.8	6.1	63.8
1985	643.0	6.6	1024.9	5.8	62.7	94.1	4.7	122.4	4.6	76.8	737.1	6.3	1147.4	5.6	64.2
1986	681.6	6.0	1080.6	5.4	63.0	98.6	4.8	128.0	4.5	77.0	780.2	5.8	1208.6	5.3	64.5
1987	728.8	6.9	1144.5	5.9	63.6	103.5	4.9	133.8	4.5	77.3	832.3	6.6	1278.3	5.7	65.1
1988	778.5	6.8	1212.0	5.9	64.2	108.5	4.9	140.2	4.8	77.4	887.1	6.5	1352.2	5.7	65.6
1989	827.9	6.3	1286.1	6.1	64.3	113.9	4.9	147.0	4.8	77.4	941.8	6.1	1433.1	5.9	65.7
1990	880.5	6.3	1355.5	5.4	64.9	119.3	4.7	154.0	4.7	77.4	999.9	6.1	1509.6	5.3	66.2
1991	939.2	6.6	1438.4	6.1	65.3	124.9	4.6	161.2	4.6	77.4	1064.2	6.4	1599.6	5.9	66.5
1992	1002.1	6.6	1533.8	6.6	65.3	130.7	4.6	168.6	4.5	77.5	1132.8	6.4	1702.5	6.4	66.5
1993	1069.5	6.7	1633.1	6.4	65.4	136.9	4.7	176.5	4.6	77.5	1206.4	6.4	1809.7	6.3	66.6
1994	1141.5	6.7	1742.6	6.7	65.5	143.3	4.7	184.9	4.7	77.5	1284.9	6.5	1927.5	6.5	66.6
1995	1218.7	6.7	1858.9	6.6	65.5	150.1	4.7	193.7	4.7	77.5	1368.8	6.5	2052.6	6.4	66.6
1996	1301.5	6.7	1984.8	6.7	65.5	157.3	4.7	203.0	4.8	77.4	1458.8	6.5	2187.9	6.5	66.6
1997	1390.2	6.8	2199.4	6.7	65.6	164.8	4.7	212.8	4.8	77.4	1555.1	6.6	2332.2	6.6	66.6

*ESTIMATED VALUE - ACTUAL NOT AVAILABLE
**FORECAST BEGINS IN 1983

PASSENGER TRAFFIC HISTORY AND FORECAST

U.S. MAJORS

TOTAL REPORT (RPKs AND ASKs IN BILLIONS)

	SCHEDULED SERVICE					NONSCHEDULED SERVICE					ALL SERVICES				
YEAR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR
1971	208.7	0.0	429.6	0.0	48.6	17.2	0.0	20.3	0.0	84.7	225.9	0.0	449.9	0.0	50.2
1972	236.5	13.3	445.4	3.6	53.1	16.2	-5.3	19.2	-5.2	84.6	252.8	11.8	464.7	3.2	54.4
1973	254.0	7.3	487.0	9.3	52.1	18.4	13.1	21.6	12.8	84.8	272.4	7.7	508.7	9.4	53.5
1974	255.1	0.4	463.9	-4.7	54.9	16.6	-9.7	19.6	-9.2	84.4	271.7	-0.2	483.6	-4.9	56.1
1975	254.9	-0.0	472.4	1.8	53.9	15.0	-9.3	18.7	-4.9	80.5	269.9	-0.6	491.1	1.5	54.9
1976	279.7	9.7	503.1	6.5	55.6	19.1	26.8	23.5	25.7	81.2	298.8	10.7	526.7	7.2	56.7
1977	301.8	7.9	538.4	7.0	56.0	19.0	-0.3	23.1	-1.7	82.3	320.9	7.3	561.5	6.6	57.1
1978	353.1	16.9	573.6	6.5	61.5	14.3	-24.8	17.4	-24.5	82.1	367.4	14.5	591.0	5.2	62.1
1979	397.0	12.4	630.6	9.9	62.9	9.7	-31.6	11.7	-32.4	83.0	406.8	10.7	642.4	8.6	63.3
1980	379.6	-4.3	643.0	1.9	59.0	5.9	-38.9	7.4	-36.6	79.9	385.6	-5.2	650.5	1.2	59.2
1981	357.0	-5.9	613.2	-4.6	58.2	3.1	-48.0	4.0	-45.6	76.5	360.1	-6.6	617.2	-5.1	58.3
1982	364.9	2.2	618.6	0.8	59.0	4.5	45.2	5.7	41.0	78.8	369.4	2.5	624.3	1.1	59.1
1983*	386.7	5.9	644.4	4.1	60.0	4.6	3.0	5.9	4.1	77.9	391.3	5.9	650.3	4.1	60.1
1984	408.3	5.5	668.8	3.7	61.0	4.7	3.2	5.9	-0.2	80.6	413.1	5.5	674.7	3.7	61.2
1985	434.5	6.4	692.2	3.5	62.7	4.9	3.1	6.1	3.0	80.7	439.4	6.3	698.3	3.4	62.9
1986	455.5	4.8	716.4	3.5	63.5	5.1	3.3	6.1	0.6	82.9	460.6	4.8	722.6	3.4	63.7
1987	482.4	5.9	751.6	4.9	64.2	5.2	2.7	6.3	2.5	83.0	487.7	5.8	757.9	4.8	64.3
1988	507.5	5.2	785.4	4.5	64.6	5.3	2.7	6.4	2.5	83.1	512.9	5.1	791.9	4.4	64.7
1989	525.4	3.5	809.0	3.0	64.9	5.5	2.7	6.6	2.7	83.1	531.0	3.5	815.7	3.0	65.1
1990	544.3	3.6	834.0	3.0	65.2	5.6	2.8	6.8	2.5	83.3	550.0	3.5	840.8	3.0	65.4
1991	567.2	4.1	862.7	3.4	65.7	5.8	2.8	7.0	2.7	83.3	573.0	4.1	869.7	3.4	65.8
1992	588.4	3.7	891.8	3.3	65.9	6.0	2.8	7.2	2.8	83.4	594.4	3.7	899.0	3.3	66.1
1993	610.7	3.8	920.8	3.2	66.3	6.2	2.9	7.4	2.6	83.6	616.9	3.7	928.2	3.2	66.4
1994	634.2	3.8	951.2	3.3	66.6	6.3	2.9	7.6	2.8	83.7	640.6	3.8	958.8	3.3	66.8
1995	659.0	3.9	984.7	3.5	66.9	6.5	2.8	7.8	2.9	83.6	665.5	3.8	992.6	3.5	67.0
1996	685.1	3.9	1019.6	3.5	67.1	6.7	2.8	8.0	2.6	83.8	691.8	3.9	1027.7	3.5	67.3
1997	713.1	4.1	1055.2	3.4	67.5	6.9	2.8	8.2	2.7	83.9	720.1	4.0	1063.5	3.4	67.7

*FORECAST BEGINS IN 1983

PASSENGER TRAFFIC HISTORY AND FORECAST

U.S. NATIONALS

TOTAL REPORT (RPKs AND ASKs IN BILLIONS)

	SCHEDULED SERVICE					NONSCHEDULED SERVICE					ALL SERVICES				
YEAR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RATE (RPKs)	ASKs	ANNUAL GROWTH RATE (ASKs)	LOAD FCTR	RPKs	ANNUAL GROWTH RANK (RPKs)	ASKs	ANNUAL GROWTH RANK (ASKs)	LOAD FCTR
1971	8.8	0.0	16.8	0.0	52.2	14.5	0.0	16.3	0.0	89.1	23.3	0.0	33.2	0.0	70.3
1972	9.8	11.1	17.7	5.2	55.1	12.6	-12.9	14.2	-12.6	88.7	22.4	-3.8	32.0	-3.5	70.1
1973	10.4	6.2	18.7	5.3	56.0	13.6	7.8	15.6	9.5	87.4	24.1	7.4	34.3	7.2	70.2
1974	11.7	11.7	20.4	9.0	57.4	13.6	-0.0	15.2	-2.6	89.7	25.3	5.1	35.6	3.7	71.2
1975	12.5	7.1	21.8	7.1	57.4	12.3	-9.6	13.9	-8.4	88.5	24.9	-1.8	35.8	0.5	69.5
1976	14.0	11.7	23.8	9.0	58.8	11.3	-7.8	12.7	-8.2	88.9	25.4	2.0	36.6	2.3	69.3
1977	15.7	12.3	26.6	11.5	59.2	13.9	22.4	15.6	21.9	89.3	29.7	16.9	42.2	15.1	70.4
1978	18.8	19.4	30.9	16.1	60.9	16.5	19.0	18.7	19.9	88.6	35.4	19.2	49.6	17.5	71.4
1979	23.3	23.9	37.6	21.8	61.9	15.4	-6.6	17.8	-4.6	86.7	38.8	9.6	55.5	11.8	69.9
1980	29.7	27.1	50.3	33.6	58.9	13.6	-12.1	17.2	-3.5	79.0	43.3	11.4	67.5	21.7	64.0
1981	39.7	33.3	63.5	26.2	62.5	13.5	-0.4	16.4	-4.1	82.1	53.3	23.0	80.0	18.4	66.5
1982	44.8	12.7	74.4	17.1	60.2	12.6	-6.8	15.5	-5.5	80.9	57.4	7.7	90.0	12.4	63.8
1983*	48.9	9.2	80.5	8.1	60.8	13.0	3.4	16.1	3.8	80.7	62.0	8.0	96.7	7.4	64.1
1984	52.3	6.9	85.2	5.8	61.4	13.5	3.5	16.7	3.6	80.6	65.8	6.2	102.0	5.4	64.5
1985	55.6	6.3	89.9	5.4	61.9	13.9	3.4	17.3	3.5	80.6	69.6	5.7	107.2	5.1	64.9
1986	58.9	5.8	94.3	4.9	62.4	14.3	2.9	17.8	2.9	80.6	73.3	5.2	112.2	4.6	65.3
1987	62.3	5.8	98.6	4.5	63.2	14.8	3.0	18.2	2.0	81.3	77.2	5.2	116.8	4.1	66.0
1988	66.0	5.9	103.7	5.1	63.6	15.2	3.0	18.8	3.1	81.2	81.3	5.3	122.5	4.8	66.3
1989	69.7	5.5	108.6	4.6	64.2	15.7	3.0	19.3	3.1	81.2	85.4	5.0	128.0	4.4	66.7
1990	73.4	5.3	113.5	4.4	64.7	16.2	3.1	19.9	3.1	81.2	89.7	4.9	133.4	4.2	67.2
1991	77.5	5.6	118.9	4.7	65.2	16.7	3.1	20.4	2.2	81.9	94.3	5.1	139.3	4.4	67.6
1992	81.6	5.2	124.8	5.0	65.4	17.2	3.1	20.9	2.4	82.5	98.9	4.9	145.8	4.6	67.8
1993	86.0	5.3	130.8	4.7	65.7	17.8	3.1	21.3	1.9	83.5	103.8	4.9	152.1	4.3	68.2
1994	90.6	5.3	136.9	4.6	66.1	18.4	3.2	22.0	3.2	83.5	109.0	4.9	158.9	4.4	68.5
1995	95.4	5.3	143.7	4.9	66.4	18.9	3.2	22.7	3.2	83.5	114.4	4.9	166.5	4.7	68.7
1996	100.6	5.3	150.6	4.7	66.7	19.6	3.2	23.4	3.2	83.5	120.2	5.0	174.1	4.5	69.0
1997	106.1	5.4	158.4	5.1	66.9	20.2	3.2	24.2	3.3	83.5	126.3	5.1	182.6	4.9	69.1

*FORECAST BEGINS IN 1983

CARGO TRAFFIC HISTORY AND FORECAST

TOTAL WORLD

TOTAL REPORT (RTKs IN BILLIONS)

	SCHEDULED SERVICES							NONSCHEDULED SERVICES		ALL SERVICES			
YEAR	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. PCT	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)
1971	13.9	0.0	7.9	0.0	56.8	6.0	0.0	1.7	0.0	7.7	0.0	15.6	0.0
1972	15.5	12.0	9.1	15.4	58.6	6.4	7.4	1.8	9.3	8.3	7.8	17.4	11.7
1973	17.9	15.3	10.6	16.5	59.2	7.3	13.6	1.5	-20.5	8.8	5.8	19.4	11.4
1974	19.4	8.0	11.7	10.1	60.3	7.7	5.1	1.5	5.0	9.2	5.1	21.0	7.8
1975	19.6	0.9	11.8	0.8	60.3	7.7	1.0	1.7	12.2	9.5	2.9	21.3	1.7
1976	21.9	11.8	13.3	13.2	61.0	8.5	9.6	2.2	27.8	10.8	13.0	24.1	13.1
1977	24.5	11.9	15.0	12.1	61.1	9.5	11.6	2.7	21.7	12.3	13.8	27.3	12.8
1978	26.6	8.7	15.9	6.1	59.7	10.7	12.8	2.7	0.4	13.5	10.0	29.4	7.9
1979	28.8	7.9	17.2	8.5	60.0	11.5	7.0	2.5	-8.1	14.0	3.9	31.3	6.4
1980	30.4	5.7	18.4	6.8	60.6	11.9	4.1	2.1	-14.6	14.1	0.7	32.6	4.0
1981	32.5	6.9	20.2	9.8	62.3	12.2	2.5	2.0	-5.0	14.3	1.3	34.6	6.1
1982	32.8*	0.7	20.9*	3.4	63.9	11.8*	-3.7	2.0*	1.0	13.9*	-3.0	34.9*	0.7
1983**	33.7	2.6	22.0	5.2	65.5	11.6	-1.7	2.1	2.5	13.7	-1.1	35.8	2.6
1984	36.4	8.1	24.2	9.8	66.5	12.2	5.0	2.2	3.4	14.4	4.8	38.6	7.8
1985	39.3	7.9	26.1	7.9	66.5	13.1	7.8	2.2	2.6	15.4	7.0	41.6	7.6
1986	42.1	7.0	28.0	7.0	66.5	14.1	7.1	2.3	4.3	16.4	6.7	44.5	6.9
1987	45.3	7.5	30.1	7.6	66.5	15.1	7.3	2.4	3.9	17.6	6.8	47.7	7.3
1988	48.6	7.2	32.4	7.4	66.6	16.2	6.9	2.5	3.7	18.7	6.5	51.1	7.1
1989	52.0	7.0	34.7	7.1	66.7	17.2	6.6	2.6	3.7	19.9	6.2	54.6	6.8
1990	55.7	7.0	37.2	7.1	66.8	18.4	6.8	2.7	3.7	21.2	6.4	58.4	6.8
1991	59.6	7.1	39.8	7.2	66.9	19.7	6.8	2.8	3.7	22.6	6.4	62.5	6.9
1992	63.9	7.1	42.7	7.1	66.9	21.1	7.1	2.9	3.7	24.1	6.6	66.8	6.9
1993	68.4	7.1	45.8	7.1	66.9	22.6	7.1	3.0	3.8	25.7	6.7	71.5	7.0
1994	73.3	7.1	49.1	7.2	66.9	24.2	7.1	3.2	3.8	27.4	6.7	76.5	7.0
1995	78.6	7.2	52.6	7.2	66.9	26.0	7.1	3.3	3.8	29.3	6.7	82.0	7.0
1996	84.3	7.1	56.4	7.2	66.9	27.8	7.1	3.4	3.8	31.3	6.7	87.7	7.0
1997	90.4	7.2	60.5	7.2	67.0	29.8	7.1	3.5	3.8	33.4	6.7	93.9	7.0

*ESTIMATED VALUES FOR NON-U.S. AIRLINES
**FORECAST BEGINS IN 1983

CARGO TRAFFIC HISTORY AND FORECAST

TOTAL U.S.

TOTAL REPORT (RTKs IN BILLIONS)

YEAR	SCHEDULED SERVICES							NONSCHEDULED SERVICES		ALL SERVICES			
	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. PCT	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)
1971	7.5	0.0	3.5	0.0	46.8	4.0	0.0	1.5	0.0	5.6	0.0	9.1	0.0
1972	8.0	6.1	3.9	10.3	48.7	4.1	2.3	1.6	4.3	5.7	2.9	9.7	5.7
1973	8.8	9.8	4.3	10.0	48.8	4.5	9.5	0.9	-43.5	5.4	-5.7	9.7	0.6
1974	8.9	1.7	4.4	3.8	49.8	4.5	-0.2	0.7	-21.4	5.2	-3.8	9.7	-0.4
1975	8.6	-3.5	4.4	-1.2	50.9	4.2	-5.7	0.6	-16.3	4.8	-7.2	9.2	-4.5
1976	9.1	5.6	4.8	8.7	52.4	4.3	2.4	0.6	13.0	5.0	3.7	9.8	6.1
1977	9.9	9.1	5.3	11.8	53.7	4.6	6.1	1.0	55.9	5.7	13.0	11.0	12.4
1978	10.3	3.5	5.1	-3.8	49.9	5.1	12.2	1.0	-1.9	6.2	9.5	11.4	3.0
1979	10.6	3.2	5.3	3.5	50.0	5.3	2.9	1.0	-4.5	6.3	1.7	11.7	2.5
1980	10.6	-0.6	5.3	-0.2	50.2	5.2	-1.0	1.0	1.7	6.3	-0.5	11.6	-0.4
1981	11.0	3.7	5.5	4.4	50.5	5.4	3.0	1.0	-0.5	6.4	2.4	12.0	3.3
1982	10.7	-2.3	5.4	-2.4	50.5	5.3	-2.2	1.0	3.0	6.3	-1.4	11.8	-1.8
1983*	10.4	-2.5	5.6	3.8	53.8	4.8	-9.0	1.0	2.2	5.9	-7.1	11.5	-2.1
1984	11.3	8.5	6.1	9.5	54.3	5.2	7.4	1.1	5.1	6.3	7.0	12.5	8.2
1985	12.2	7.8	6.6	7.4	54.1	5.6	8.3	1.2	5.2	6.8	7.7	13.4	7.6
1986	12.9	5.6	6.9	4.8	53.6	6.8	6.6	1.2	5.3	7.2	6.4	14.2	5.6
1987	13.8	6.8	7.4	6.4	53.4	6.4	7.3	1.3	4.6	7.7	6.8	15.1	6.6
1988	14.7	6.2	7.8	5.7	53.2	6.8	6.8	1.3	4.4	8.2	6.4	16.1	6.1
1989	15.5	5.2	8.1	4.4	52.8	7.3	6.1	1.4	4.4	8.7	5.9	16.9	5.2
1990	16.3	5.1	8.5	4.2	52.3	7.7	6.2	1.5	4.4	9.2	5.9	17.8	5.1
1991	17.2	5.5	8.9	4.6	51.9	8.2	6.4	1.5	4.5	9.8	6.1	18.7	5.4
1992	18.1	5.4	9.3	4.6	51.4	8.8	6.4	1.6	4.5	10.4	6.1	19.8	5.4
1993	19.1	5.4	9.7	4.6	51.0	9.3	6.4	1.7	4.5	11.1	6.1	20.8	5.3
1994	20.1	5.4	10.2	4.6	50.6	9.9	6.3	1.8	4.5	11.7	6.0	21.9	5.3
1995	21.2	5.4	10.6	4.6	50.2	10.6	6.3	1.8	4.5	12.4	6.0	23.1	5.3
1996	22.4	5.4	11.1	4.6	49.8	11.2	6.2	1.9	4.5	13.2	5.9	24.4	5.3
1997	23.6	5.4	11.7	4.6	49.5	11.9	6.1	2.0	4.5	14.0	5.9	25.7	5.3

*FORECAST BEGINS IN 1983

CARGO TRAFFIC HISTORY AND FORECAST

TOTAL NON-U.S.

TOTAL REPORT (RTKs IN BILLIONS)

YEAR	SCHEDULED SERVICES							NONSCHEDULED SERVICES		ALL SERVICES			
	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. PCT	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)
1971	6.3	0.0	4.3	0.0	68.8	1.9	0.0	0.1	0.0	2.1	0.0	6.4	0.0
1972	7.5	19.1	5.2	19.7	69.2	2.3	17.9	0.2	68.5	2.5	21.1	7.7	20.1
1973	9.1	21.2	6.3	21.4	69.3	2.8	20.7	0.5	***	3.3	32.1	9.7	24.9
1974	10.4	14.1	7.2	14.4	69.4	3.1	13.7	0.8	49.2	4.0	19.6	11.2	16.2
1975	10.9	4.7	7.4	2.1	67.7	3.5	10.6	1.1	37.4	4.6	16.2	12.0	7.1
1976	12.7	16.7	8.5	15.9	67.2	4.1	18.4	1.5	35.8	5.7	22.7	14.3	18.6
1977	14.5	13.9	9.6	12.2	66.2	4.9	17.4	1.6	6.5	6.5	14.4	16.2	13.1
1978	16.3	12.3	10.7	11.7	65.9	5.5	13.4	1.7	1.9	7.2	10.4	18.0	11.2
1979	18.1	10.9	11.9	10.9	65.9	6.1	10.8	1.5	-10.3	7.7	5.8	19.6	8.9
1980	19.8	9.5	13.1	9.9	66.2	6.7	8.6	1.1	-25.5	7.8	1.8	20.9	6.7
1981	21.5	8.6	14.7	12.0	68.2	6.8	2.0	1.0	-9.0	7.8	0.4	22.6	7.7
1982	22.0*	2.3	15.5*	5.6	70.5	6.5*	-4.8	1.0*	-0.9	7.5*	-4.3	23.0*	2.1
1983**	23.2	5.2	16.4	5.6	70.8	6.7	4.2	1.0	2.9	7.8	4.0	24.2	5.1
1984	25.0	7.9	18.0	9.8	72.0	7.0	3.3	1.0	1.6	8.0	3.1	26.1	7.7
1985	27.0	7.9	19.5	8.1	72.1	7.5	7.4	1.0	-0.1	8.6	6.4	28.1	7.6
1986	29.1	7.6	21.0	7.7	72.2	8.1	7.5	1.1	3.1	9.2	6.9	30.2	7.5
1987	31.4	7.8	22.7	8.1	72.3	8.7	7.3	1.1	3.1	9.8	6.8	32.6	7.7
1988	33.9	7.7	24.5	8.0	72.5	9.3	7.0	1.1	2.9	10.4	6.5	35.0	7.5
1989	36.5	7.7	26.5	8.0	72.7	9.9	7.0	1.2	2.9	11.1	6.6	37.7	7.6
1990	39.3	7.8	28.6	7.9	72.8	10.7	7.3	1.2	2.9	11.9	6.9	40.6	7.6
1991	42.4	7.7	30.9	7.9	72.9	11.4	7.2	1.2	2.9	12.7	6.7	43.7	7.6
1992	45.7	7.7	33.4	7.8	73.0	12.3	7.5	1.3	2.9	13.6	7.1	47.0	7.6
1993	49.3	7.8	36.0	7.8	73.0	13.2	7.6	1.3	2.9	14.6	7.1	50.6	7.8
1994	53.2	7.8	38.8	7.9	73.1	14.3	7.6	1.3	2.9	15.7	7.2	54.5	7.7
1995	57.3	7.8	41.9	7.9	73.1	15.4	7.6	1.4	2.9	16.8	7.2	58.8	7.7
1996	61.8	7.8	45.2	7.8	73.2	16.6	7.7	1.4	2.9	18.0	7.3	63.3	7.7
1997	66.7	7.8	48.8	7.8	73.2	17.8	7.7	1.5	2.9	19.4	7.3	68.2	7.7

*ESTIMATED VALUE - ACTUAL NOT AVAILABLE
**FORECAST BEGINS IN 1983
***GROWTH RATE EXCEEDS 100 PERCENT (OR IS -100)

CARGO TRAFFIC HISTORY AND FORECAST

U.S. MAJORS

TOTAL REPORT (RTKs IN BILLIONS)

	SCHEDULED SERVICES							NONSCHEDULED SERVICES		ALL SERVICES			
YEAR	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. PCT	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)
1971	5.9	0.0	3.4	0.0	57.7	2.5	0.0	0.6	0.0	3.1	0.0	6.6	0.0
1972	6.3	5.5	3.8	10.3	60.3	2.5	-0.8	0.5	-9.9	3.1	-2.7	6.9	4.0
1973	6.7	6.9	4.2	10.2	62.2	2.5	2.0	0.2	-51.7	2.8	-8.2	7.0	1.9
1974	6.8	1.2	4.3	3.5	63.6	2.4	-2.6	0.2	-25.7	2.7	-4.9	7.0	0.1
1975	6.5	-4.5	4.3	-1.3	65.7	2.2	-10.0	0.1	-15.2	2.4	-10.4	6.7	-4.8
1976	6.9	6.4	4.6	8.9	67.3	2.2	1.5	0.1	-19.3	2.4	-0.0	7.1	5.7
1977	7.6	10.1	5.2	12.0	68.5	2.4	6.0	0.1	-11.4	2.5	4.9	7.8	9.6
1978	7.5	-1.9	5.0	-4.1	67.0	2.4	2.7	0.1	-21.8	2.5	1.5	7.6	-2.2
1979	7.6	1.7	5.2	3.5	68.1	2.4	-1.8	**	-51.8	2.4	-3.8	7.7	1.0
1980	7.3	-3.7	5.1	-1.0	70.0	2.2	-9.5	**	22.7	2.2	-8.8	7.4	-3.5
1981	7.5	2.4	5.2	1.4	69.4	2.3	4.8	**	-39.6	2.3	3.6	7.5	2.1
1982	7.1	-4.7	5.0	-3.3	70.4	2.1	-7.8	**	56.2	2.1	-6.8	7.2	-4.4
1983*	6.7	-6.3	5.2	3.6	77.9	1.4	-30.0	**	-84.8	1.4	-31.4	6.7	-6.9
1984	7.3	9.2	5.7	9.7	78.3	1.5	7.2	**	8.4	1.6	7.2	7.3	9.2
1985	7.9	7.7	6.1	7.5	78.1	1.7	8.3	**	11.9	1.7	8.4	7.9	7.7
1986	8.2	4.6	6.4	4.7	78.2	1.8	4.5	**	15.5	1.8	4.5	8.3	4 6
1987	8.8	6.4	6.8	6.4	78.1	1.9	6.7	**	19.8	1.9	6.8	8.8	6.5
1988	9.3	5.8	7.2	5.7	78.1	2.0	6.0	**	2.5	2.0	5.9	9.3	5.8
1989	9.7	4.4	7.6	4.4	78.1	2.1	4.3	**	2.6	2.1	4.3	9.7	4.4
1990	10.1	3.9	7.9	4.0	78.2	2.2	3.6	**	2.6	2.2	3.6	10.1	3.9
1991	10.5	4.3	8.2	4.4	78.2	2.3	3.9	**	2.6	2.3	3.9	10.5	4.3
1992	11.0	4.3	8.6	4.4	78.3	2.3	3.9	**	2.6	2.4	3.9	11.0	4.3
1993	11.5	4.3	9.0	4.4	78.4	2.4	3.9	**	2.6	2.5	3.9	11.5	4.3
1994	12.0	4.3	9.4	4.4	78.5	2.5	3.9	**	2.7	2.6	3.9	12.0	4.3
1995	12.5	4.3	9.8	4.4	78.5	2.6	4.0	**	2.7	2.7	3.9	12.5	4.3
1996	13.0	4.3	10.2	4.4	78.6	2.7	4.0	**	2.7	2.8	4.0	13.1	4.3
1997	13.6	4.3	10.7	4.4	78.7	2.9	4.0	**	2.7	2.9	4.0	13.6	4.3

*FORECAST BEGINS IN 1983
**LESS THAN 50 MILLION RTKs

CARGO TRAFFIC HISTORY AND FORECAST

U.S. NATIONALS

TOTAL REPORT (RTKs IN BILLIONS)

	SCHEDULED SERVICES							NONSCHEDULED SERVICES		ALL SERVICES			
YEAR	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. RTKs	ANNUAL GROWTH RATE (RTKs)	B.P. PCT	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	FRTR RTKs	ANNUAL GROWTH RATE (RTKs)	TOTAL RTKs	ANNUAL GROWTH RATE (RTKs)
1971	1.5	0.0	.1	0.0	5.1	1.4	0.0	0.7	0.0	2.2	0.0	2.3	0.0
1972	1.7	8.0	.1	11.4	5.3	1.6	7.8	0.8	17.0	2.4	10.8	2.5	10.8
1973	2.0	20.3	.1	2.0	4.5	1.9	21.3	0.4	-44.9	2.4	-1.4	2.5	-1.3
1974	2.1	3.4	.1	15.1	5.0	2.0	2.9	0.3	-20.2	2.3	-1.5	2.4	-0.9
1975	2.1	-0.3	.1	3.0	5.2	2.0	-0.4	0.3	-6.5	2.3	-1.4	2.4	-1.2
1976	2.1	3.1	.1	-2.0	4.9	2.0	3.4	0.4	38.2	2.5	8.5	2.6	8.0
1977	2.3	6.1	.1	2.6	4.8	2.2	6.3	0.8	72.3	3.0	18.7	3.1	18.1
1978	2.8	21.8	.1	5.6	4.1	2.7	22.6	0.8	8.7	3.6	18.8	3.7	18.3
1979	3.0	7.3	.1	4.8	4.0	2.9	7.4	0.9	0.4	3.8	5.7	3.9	5.6
1980	3.2	7.1	.1	33.5	5.0	3.0	6.0	0.9	3.2	4.0	5.4	4.1	6.2
1981	3.4	6.5	.3	97.8	9.3	3.1	1.7	0.9	0.7	4.0	1.5	4.3	5.2
1982	3.5	2.8	.3	12.9	10.2	3.1	1.8	0.9	-2.5	4.1	0.8	4.4	1.7
1983*	3.7	5.1	.3	6.8	10.4	3.3	4.9	0.9	7.4	4.3	5.5	4.7	5.6
1984	4.0	7.4	.4	6.7	10.3	3.6	7.5	1.0	5.0	4.6	6.9	5.0	6.9
1985	4.3	8.0	.4	5.8	10.1	3.9	8.3	1.0	5.1	4.9	7.6	5.4	7.4
1986	4.6	7.5	.4	6.7	10.0	4.2	7.6	1.1	5.1	5.3	7.0	5.8	7.0
1987	5.0	7.5	.5	6.8	10.0	4.5	7.6	1.1	4.3	5.7	6.9	6.2	6.9
1988	5.3	7.0	.5	5.7	9.8	4.8	7.2	1.2	4.3	6.0	6.6	6.6	6.5
1989	5.7	6.7	.5	4.9	9.7	5.1	6.9	1.2	4.3	6.4	6.4	7.0	6.3
1990	6.1	7.2	.5	6.7	9.6	5.5	7.2	1.3	4.3	6.9	6.6	7.5	6.6
1991	6.6	7.4	.6	7.4	9.6	5.9	7.4	1.4	4.3	7.3	6.8	8.0	6.8
1992	7.1	7.3	.6	6.9	9.6	6.4	7.3	1.4	4.3	7.8	6.8	8.5	6.8
1993	7.6	7.2	.7	6.8	9.6	6.8	7.3	1.5	4.3	8.4	6.7	9.1	6.7
1994	8.1	7.1	.7	6.7	9.5	7.3	7.2	1.6	4.3	8.9	6.7	9.7	6.7
1995	8.7	7.0	.8	6.7	9.5	7.9	7.1	1.6	4.4	9.5	6.6	10.4	6.6
1996	9.3	6.9	.8	6.6	9.5	8.4	7.0	1.7	4.4	10.2	6.5	11.1	6.5
1997	9.9	6.8	.9	6.6	9.4	9.0	6.8	1.8	4.4	10.8	6.4	11.8	6.4

*FORECAST BEGINS IN 1983

APPENDIX D
AIRCRAFT DETAIL

TOTAL WORLD

PASSENGER AIRCRAFT REQUIREMENT BY GENERIC CLASS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	TOTAL
SHORT-RANGE 110																	
PREMANENTLY RETIRED		(108)	(187)	(167)	(162)	(138)	(183)	(138)	(132)	(117)	(71)	(67)	(44)	(37)	(39)	(38)	(1,628)
ORDERS		85	46	19	0	2	2	2	2	2							160
OPTIONS		1	10	3	6	5	5	5									35
GENERIC AIRCRAFT		2	4	14	52	95	118	113	72	62	52	47	37	32	24	34	758
END-OF-YEAR TOTAL	2,227	2,207	2,080	1,949	1,845	1,809	1,751	1,733	1,675	1,622	1,603	1,583	1,576	1,571	1,556	1,552	
SHORT-RANGE 150																	
PERMANENTLY RETIRED		(0)	(0)	(0)	(30)	(54)	(59)	(75)	(62)	(69)	(53)	(46)	(52)	(64)	(65)	(24)	(653)
ORDERS		45	29	17	14	1											106
OPTIONS			5	12	8	4	1	1	1								30
GENERIC AIRCRAFT		2	21	38	27	132	155	161	160	166	140	132	126	101	116	112	1,589
END-OF-YEAR TOTAL	1,324	1,371	1,426	1,493	1,510	1,593	1,690	1,777	1,876	1,973	2,060	2,146	2,220	2,257	2,308	2,396	
MEDIUM-RANGE 200																	
PERMANENTLY RETIRED		(9)	(11)	(17)	(7)	(4)	(6)	(0)	(1)	(0)							(57)
ORDERS		99	70	85	51	31	8	4	0	0	0	0	7	5			360
OPTIONS			2	20	23	28	27	2	5	4	2						113
GENERIC AIRCRAFT		8	18	17	33	21	37	46	38	53	53	45	67	77	78	77	668
END-OF-YEAR TOTAL	90	188	267	372	472	548	620	672	714	763	818	872	946	1,028	1,106	1,183	
LONG-RANGE 200																	
PERMANENTLY RETIRED		(84)	(57)	(42)	(16)	(17)	(10)	(3)									(229)
END-OF-YEAR TOTAL	250	166	109	67	51	34	24	21	21	21	21	21	21	21	21	21	
MEDIUM-RANGE 270																	
PERMANENTLY RETIRED		(18)	(12)	(9)	(5)	(5)	(5)	(7)	(2)	(3)	(36)	(62)	(48)	(25)	(14)	(4)	(255)
ORDERS		30	19														49
OPTIONS		6	1	9	4												20
GENERIC AIRCRAFT				5	11	28	31	38	42	38	61	55	55	58	52	30	504
END-OF-YEAR TOTAL	599	617	625	630	640	663	689	720	760	795	820	813	820	853	891	917	
LONG-RANGE 270																	
PERMANENTLY RETIRED		(6)	(1)	(4)	(0)	(0)	(0)	(0)	(0)	(4)	(19)	(20)	(12)	(19)	(10)	(7)	(102)
ORDERS		10															10
OPTIONS		1	0	0	7	7	7										22
GENERIC AIRCRAFT			11	2	16	16	21	18	18	19	23	18	19	31	31	20	264
END-OF-YEAR TOTAL	350	355	365	363	386	409	437	455	473	488	492	491	498	510	531	544	
MEDIUM/LONG-RANGE 400																	
PERMANENTLY RETIRED		(2)	(0)	(0)	(0)	(4)	(1)	(3)	(15)	(35)	(30)	(29)	(18)	(18)	(14)	(11)	(180)
ORDERS		5	3														8
OPTIONS			1	4	1	2	2	2									12
GENERIC AIRCRAFT			3	8	5	3	13	10	20	56	61	82	58	61	54	51	463
END-OF-YEAR TOTAL	368	371	378	388	394	395	409	418	423	444	475	508	548	591	631	671	
MEDIUM-RANGE 600																	
PERMANENTLY RETIRED																	
ORDERS		1	1	1													3
OPTIONS					1												1
GENERIC AIRCRAFT								1	0	0	2	2	4	4	4	7	24
END-OF-YEAR TOTAL	0	1	2	3	4	4	4	5	5	5	7	9	13	17	21	28	
LONG-RANGE 600																	
PERMANENTLY RETIRED																	
ORDERS		9	6	0	1												16
OPTIONS				2	2												4
GENERIC AIRCRAFT						4	4	3	6	9	20	28	22	21	16	21	154
END-OF-YEAR TOTAL	1	10	16	18	21	25	29	32	38	47	67	95	117	138	154	175	
TOTAL																	
PERMANENTLY RETIRED		(227)	(268)	(239)	(220)	(222)	(258)	(226)	(212)	(236)	(209)	(224)	(174)	(163)	(142)	(84)	(3,104)
ORDERS		284	174	122	66	34	10	6	2	2	0	9	7	5			721
OPTIONS		8	19	50	50	46	42	10	6	4	2						237
GENERIC AIRCRAFT		12	57	82	144	299	379	390	356	403	412	390	388	385	375	352	4,424
TOTAL FLEET	5,209	5,286	5,268	5,283	5,323	5,480	5,653	5,833	5,985	6,158	6,363	6,538	6,759	6,986	7,219	7,487	

*INCLUDES CONVERTIBLE FREIGHTER AIRCRAFT USED IN PASSENGER TRAFFIC.

83 GEN 23548